JOURNAL OF FLUID MECHANICS

INDEX

OF AUTHORS OF PAPERS IN VOLUMES 21 to 40

January 1965 – March 1970

CAMBRIDGE
AT THE UNIVERSITY PRESS
1970

Price 10*s.* ($1.75)

The JOURNAL OF FLUID MECHANICS exists for the publication of theoretical and experimental investigations of all aspects of the mechanics of fluids.

EDITORS

PROF. G. K. BATCHELOR, DR H. K. MOFFATT

Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Silver Street, Cambridge CB3 9EW, England

ASSOCIATE EDITORS

PROF. G. F. CARRIER, *Pierce Hall, Harvard University, Cambridge* 38, *Massachusetts* 02138, *U.S.A.*

DR W. C. GRIFFITH, *Building* 102, *Plant* 1, *Lockheed Missiles and Space Company, P.O. Box* 504, *Sunnyvale, California* 94088, *U.S.A.*

PROF. M. J. LIGHTHILL, *Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Silver Street, Cambridge CB3 9EW, England*

PROF. J. W. MILES, *Institute of Geophysics and Planetary Physics, University of California, La Jolla, California* 92038, *U.S.A.*

PROF. O. M. PHILLIPS, *Department of Mechanics, The Johns Hopkins University, Baltimore* 18, *Maryland* 21218, *U.S.A.*

PROF. L. E. SCRIVEN, *Department of Chemical Engineering, University of Minnesota, Minneapolis, Minnesota* 55455, *U.S.A.*

ASSISTANT EDITORS

DR F. P. BRETHERTON (*Johns Hopkins*), DR M. D. COWLEY (*Cambridge*)

PROF. S. H. DAVIS (*Johns Hopkins*), DR M. E. MCINTYRE (*Cambridge*)

SUBSCRIPTIONS

The JOURNAL OF FLUID MECHANICS is published semi-monthly, except in January, May, September and December when monthly. Single parts 42*s.* 6*d.* net ($6.75 in the U.S.A.) plus postage. Four parts form a volume. The subscription price of a volume (which includes postage) is £6 10*s.* net ($22.50 in the U.S.A.).

Copies of the journal for subscribers in the United States of America are sent by air to New York to arrive with the minimum delay. Second class postage is paid at New York, N.Y.

Published by Cambridge University Press, Bentley House, 200 Euston Road, London, N.W.1. American Branch, 32 East 57th Street, New York, N.Y. 10022.

JOURNAL OF FLUID MECHANICS

INDEX

OF AUTHORS OF PAPERS IN VOLUMES 21 to 40

January 1965 – March 1970

CAMBRIDGE
AT THE UNIVERSITY PRESS
1970

PUBLISHED BY
THE SYNDICS OF THE CAMBRIDGE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London, N.W. 1
American Branch: 32 East 57th Street, New York, N.Y. 10022

Price 10*s.* or $1·75

Printed in Great Britain at the University Printing House, Cambridge

INDEX OF AUTHORS

Abas, S. Stability of a Hartmann boundary layer under the influence of a parallel magnetic field, **32**, 1968, 721

The effect of a parallel magnetic field on the stability of free boundary-layer type flows of low magnetic Reynolds number, **38**, 1969, 243

Abbas, M. A. & Latham, J. The instability of evaporating charged drops, **30**, 1967, 663

Abbott, T. N. G. & Walters, K. Rheometrical flow systems. Part 2. Theory for the orthogonal rheometer, including an exact solution of the Navier–Stokes equations, **40**, 1970, 205

Achenbach, E. Distribution of local pressure and skin friction around a circular cylinder in cross-flow up to $Re = 5 \times 10^6$, **34**, 1968, 625

Ackerberg, Robert C. The viscous incompressible flow inside a cone, **21**, 1965, 47

On a non-linear theory of thin jets. Part 1, **31**, 1968, 583

On a non-linear theory of thin jets. Part 2. A linear theory for small injection angles, **33**, 1968, 261

Acrivos, Andreas & Goddard, J. D. Asymptotic expansions for laminar forced-convection heat and mass transfer. Part 1. Low speed flows, **23**, 1965, 273

Acrivos, Andreas, Leal, L. G., Snowden, D. D. & Pan, F. Further experiments on steady separated flows past bluff objects, **34**, 1968, 25

Acrivos, Andreas, Snowden, D. D., Grove, A. S. & Petersen, E. E. The steady separated flow past a circular cylinder at large Reynolds numbers, **21**, 1965, 737

See also Berg, Boudart & Acrivos; Davis & Acrivos; Goddard & Acrivos; Leal & Acrivos; Liang, Vidal & Acrivos; Pan & Acrivos; Robertson & Acrivos; Vidal & Acrivos

Adams, J. K. & Buchwald, V. T. The generation of continental shelf waves, **35**, 1969, 815

Adamson, T. C. Solutions for supersonic rotational flow around a corner using a new co-ordinate system, **34**, 1968, 735

Aldridge, Keith D. & Toomre, Alar Axisymmetric inertial oscillations of a fluid in a rotating spherical container, **37**, 1969, 307

Allen, J. R. L. Note on the use of plaster of paris in flow visualisation, and some geological applications, **25**, 1966, 331

Allen, R. F. The effects of interference and viscosity in the Kelvin ship-wave problem, **34**, 1968, 417

Allen, S. J. & DeSilva, C. N. A theory of transversely isotropic fluids, **24**, 1966, 801

Anand, R. K. *See* Quarmby & Anand

Anderson, Donald G. Numerical solutions of the Krook kinetic equation, **25**, 1966, 271

On the steady Krook kinetic equation. Part 1, **26**, 1966, 17

Apelt, C. J. Hartmann flow in annular channels. Part 2. Numerical solutions for low to moderate Hartmann numbers, **37**, 1969, 209

Arora, N. L. An integral-transform method for shock–shock interaction studies, **34**, 1968, 209

Arpaci, Vedat S. *See* Vest & Arpaci

Atwell, N. P. *See* Bradshaw, Ferriss & Atwell

Aucoin, P. J. *See* Newell, Lange & Aucoin

Bach, Glen G. & Lee, John H. Initial propagation of impulsively generated converging cylindrical and spherical shock waves, **37**, 1969, 513

Badri Narayanan, M. A. An experimental study of reverse transition in two-dimensional channel flow, **31**, 1968, 609

Badri Narayanan, M. A. & Ramjee, V. On the criteria for reverse transition in a two-dimensional boundary layer flow, **35**, 1969, 225

Baganoff, D. Experiments on the wall-pressure history in shock-reflexion processes, **23**, 1965, 209

Baines, P. G. Forced oscillations of an enclosed rotating fluid, **30**, 1967, 533

Baines, P. G. & Gill, A. E. On thermohaline convection with linear gradients, **37**, 1969, 289

Baines, W. D. *See* Lau & Baines

Baines, W. D. & Turner J. S. Turbulent buoyant convection from a source in a confined region, **37**, 1969, 51

Baker, D. James A technique for the precise measurement of small fluid velocities, **26**, 1966, 573

Shear layers in a rotating fluid, **29**, 1967, 165

Baker, Roger C. On the potential distribution resulting from flow across a magnetic field projecting from a plane wall, **33**, 1968, 73

Baldwin, Lionel V. *See* Kuo & Baldwin

Ball, F. K. The effect of rotation on the simpler modes of motion of a liquid in an elliptic paraboloid, **22**, 1965, 529

Second-class motions of a shallow liquid, **23**, 1965, 545

Ban, S. D. & Kuerti, G. The interaction region in the boundary layer of a shock tube, **38**, 1969, 109

Banks, Robert B. & Bhavamai, Anusornant Experimental study of the impingement of a liquid jet on the surface of a heavier liquid, **23**, 1965, 229

Banks, W. H. H. A three-dimensional laminar boundary layer calculation, **28**, 1967, 769

Barcilon, Albert I. Vortex decay above a stationary boundary, **27**, 1967, 155

Barcilon, V. On the motion due to sources and sinks distributed along the vertical boundary of a rotating fluid, **27**, 1967, 551

Stewartson layers in transient rotating fluid flows, **33**, 1968, 815

Barcilon, V. & Pedlosky, J. Linear theory of rotating stratified fluid motions, **29**, 1967, 1

A unified linear theory of homogeneous and stratified rotating fluids, **29**, 1967, 609

On the steady motions produced by a stable stratification in a rapidly rotating fluid, **29**, 1967, 673

Barratt, M. J. The wave drag of a Hovercraft, **22**, 1965, 39

Barrett, K. E. On the impulsively started rotating sphere, **27**, 1967, 779

Beard, D. W., Davies, M. H. & Walters, K. The stability of elastico-viscous flow between rotating cylinders. Part 3. Overstability in viscous and Maxwell fluids, **24**, 1966, 321

Beardsley, R. C. A laboratory model of the wind-driven ocean circulation, **38**, 1969, 255

Bearman, P. W. Investigation of the flow behind a two-dimensional model with a blunt trailing edge and fitted with splitter plates, **21**, 1965, 241

On vortex street wakes, **28**, 1967, 625

On vortex shedding from a circular cylinder in the critical Reynolds number régime, **37**, 1969, 577

Beavers, Gordon S. & Joseph, Daniel D. Boundary conditions at a naturally permeable wall, **30**, 1967, 197

Becker, H. A., Hottel, H. C. & Williams, G. C. On the light-scatter technique for the study of turbulence and mixing, **30**, 1967, 259

The nozzle-fluid concentration field of the round, turbulent, free jet, **30**, 1967, 285

Becker, H. A. & Massaro, T. A. Vortex evolution in a round jet, **31**, 1968, 435

Bell, J. B. *See* Perry, Bell & Joubert

Bellhouse, B. J. Velocity and pressure distributions in the aortic valve, **37**, 1969, 587

Bellhouse, B. J. & Schultz, D. L. Determination of mean and dynamic skin friction, separation and transition in low-speed flow with a thin-film heated element, **24**, 1966, 379

The determination of fluctuating velocity in air with heated thin film gauges, **29**, 1967, 289

The measurement of fluctuating skin friction in air with heated thin film gauges, **32**, 1968, 675

Bellhouse, B. J. & Talbot, L. The fluid mechanics of the aortic valve, **35**, 1969, 721

Belozerov, A. N. & Measures, R. M. The initial ionization of hydrogen in a strong shock wave, **36**, 1969, 695

Benjamin, T. Brooke Internal waves of finite amplitude and permanent form, **25**, 1966, 241

Some developments in the theory of vortex breakdown, **28**, 1967, 65

Internal waves of permanent form in fluids of great depth, **29**, 1967, 559

Gravity currents and related phenomena, **31**, 1968, 209

Upstream influence, **40**, 1970, 49

Benjamin, T. Brooke & Feir, J. E. The disintegration of wave trains on deep water. Part 1. Theory, **27**, 1967, 417

Benton, Edward R. Laminar boundary layer on an impulsively started rotating sphere, **23**, 1965, 611

On the flow due to a rotating disk, **24**, 1966, 781

Benton, Edward R. & Loper, David E. On the spin-up of an electrically conducting fluid. Part 1. The unsteady hydromagnetic Ekman–Hartmann boundary-layer problem, **39**, 1969, 561

Benton, G. S. & Boyer, D. Flow through a rapidly rotating conduit of arbitrary cross-section, **26**, 1966, 69

Berg, J. C., Boudart, M. & Acrivos, Andreas Natural convection in pools of evaporating liquids, **24**, 1966, 721

Berger, S. A. *See* Talke & Berger; Viviand & Berger

Berndt, Sune B. The vorticity jump across a flow discontinuity, **26**, 1966, 433

Bernstein, L. *See* Davies & Bernstein

Bershader, Daniel & Griffith, Wayland C. Report on the Seventh International Shock Tube Symposium, **39**, 1969, 727

See also Wong & Bershader

Betchov, R. On the curvature and torsion of an isolated vortex filament, **22**, 1965, 471

Bhangu, J. K. Shock-tube studies of vibrational relaxation in nitrous oxide, **25**, 1966, 817

See also Rees & Bhangu

Bhatnagar, P. L., Sachdev, P. L. & Prasad, Phoolan Spherical piston problems in water, **39**, 1969, 587

Bhavamai, Anusornant *See* Banks & Bhavamai

Bird, G. A. One-dimensional compression of a collisionless gas, **21**, 1965, 183

The velocity distribution function within a shock wave, **30**, 1967, 479

The structure of normal shock waves in a binary gas mixture, **31**, 1968, 657

The structure of rarefied gas flows past simple aerodynamic shapes, **36**, 1969, 571

See also Johannesen, Bird & Zienkiewicz

Bisshopp, F. E. & Niiler, P. P. Onset of convection in a rapidly rotating sphere, **23**, 1965, 459

See also Niiler & Bisshopp

Black, Jared L. *See* Mei & Black

Blair, L. M. & Quinn, J. A. The onset of cellular convection in a fluid layer with time-dependent density gradients, **36**, 1969, 385

Blankenship, V. D. Shock-shock interaction on a slender supersonic cone, **22**, 1965, 599

Bloor, M. I. G. Determination of the sonic line in hypersonic flow past a blunt body, **21**, 1965, 495

Effect of radiative heat loss on steady hypersonic flow past a blunt body, **29**, 1967, 485

Blumen, William Shear layer instability of an inviscid compressible fluid, **40**, 1970, 769

Blythe, P. A. Non-linear wave propagation in a relaxing gas, **37**, 1969, 31

Blythe, P. A., Petty, D. G., Schofield, D. & Wilson, J. L. On the structure of a class of aerothermodynamic shocks, **37**, 1969, 349

Bole, James B. & Hsu, En Yun Response of gravity water waves to wind excitation, **35**, 1969, 657

Booker, John R. & Bretherton, Francis P. The critical layer for internal gravity waves in a shear flow, **27**, 1967, 513

Boudart, M. *See* Berg, Boudart & Acrivos

Bowden, K. F. Horizontal mixing in the sea due to a shearing current, **21**, 1965, 83

Boyer, D. *See* Benton & Boyer

Bradbury, L. J. S. The structure of a self-preserving turbulent plane jet, **23**, 1965, 31

Bradbury, L. J. S. & Riley, J. The spread of a turbulent plane jet issuing into a parallel moving airstream, **27**, 1967, 381

Bradshaw, P. The effect of wind-tunnel screens on nominally two-dimensional boundary layers, **22**, 1965, 679

The effect of initial conditions on the development of a free shear layer, **26**, 1966, 225

Irrotational fluctuations near a turbulent boundary layer, **27**, 1967, 209

The turbulence structure of equilibrium boundary layers, **29**, 1967, 625

'Inactive' motion and pressure fluctuations in turbulent boundary layers, **30**, 1967, 241

A note on reverse transition, **35**, 1969, 387

The analogy between streamline curvature and buoyancy in turbulent shear flow, **36**, 1969, 177

Bradshaw, P., Ferriss, D. H. & Atwell, N. P. Calculation of boundary-layer development using the turbulent energy equation, **28**, 1967, 593

Bradshaw, P. & Galea, P. V. Step-induced separation of a turbulent boundary layer in incompressible flow, **27**, 1967, 111

Bragg, G. M. The turbulent boundary layer in a corner, **36**, 1969, 485

Brand, R. S. & Lahey, F. J. The heated laminar vertical jet, **29**, 1967, 305

Breach, D. R. *See* Chester & Breach

Brennen, C. The dynamic balances of dissolved air and heat in natural cavity flows, **37**, 1969, 115

A numerical solution of axisymmetric cavity flows, **37**, 1969, 671

Brenner, H. *See* Cox & Brenner; Feldman & Brenner

Bretherton, F. P. The time-dependent motion due to a cylinder moving in an unbounded rotating or stratified fluid, **28**, 1967, 545

On the mean motion induced by internal gravity waves, **36**, 1969, 785

Bretherton, F. P., Carrier, G. F. & Longuet-Higgins, M. S. Report on the I.U.T.A.M. symposium on rotating fluid systems, **26**, 1966, 393

Bretherton, F. P. & Turner, J. S. On the mixing of angular momentum in a stirred rotating fluid, **32**, 1968, 449

See also Booker & Bretherton

Briscoe, M. G. & Kovitz, A. A. Experimental and theoretical study of the stability of plane shock waves reflected normally from perturbed flat walls, **31**, 1968, 529

Brodkey, Robert S. *See* Corino & Brodkey; Nye & Brodkey

Browand, F. K. An experimental investigation of the instability of an incompressible, separated shear layer, **26**, 1966, 281

Brown, G. L. *See* Spence & Brown

Brown, K. C. & Joubert, P. N. The measurement of skin friction in turbulent boundary layers with adverse pressure gradients, **35**, 1969, 737

Brown, S. N. The compressible inviscid leading-edge vortex, **22**, 1965, 17

Brown, S. N. & Stewartson, K. On similarity solutions of the boundary-layer equations with algebraic decay, **23**, 1965, 673

Brown-Edwards, E. G. Temperature measurements in a hypersonic gun tunnel using a modified line-reversal method, **27**, 1967, 493

Buchwald, V. T. The diffraction of Kelvin waves at a corner, **31**, 1968, 193

See also Adams & Buchwald

Buckmaster, John Separation and magnetohydrodynamics, **38**, 1969, 481

Bull, M. K. Wall-pressure fluctuations associated with subsonic turbulent boundary layer flow, **28**, 1967, 719

Burggraf, Odus R. Analytical and numerical studies of the structure of steady separated flows, **24**, 1966, 113

Burns, J. C. & Parkes, T. Peristaltic motion, **29**, 1967, 731

Bush, William B. Hypersonic strong-interaction similarity solutions for flow past a flat plate, **25**, 1966, 51

Bush, William B. & Cross, Arthur K. Hypersonic weak-interaction similarity solutions for flow past a flat plate, **29**, 1967, 349

See also Cross & Bush

Busse, F. H. Non-stationary finite amplitude convection, **28**, 1967, 223

The stability of finite amplitude cellular convection and its relation to an extremum principle, **30**, 1967, 625

Shear flow instabilities in rotating systems, **33**, 1968, 577

Steady fluid flow in a precessing spheroidal shell, **33**, 1968, 739

On Howard's upper bound for heat transport by turbulent convection, **37**, 1969, 457

See also Schlüter, Lortz & Busse

Butler, D. S. One-dimensional flow in an ionizing gas, **23**, 1965, 1

Buyevich, Yu. A., Leonov, A. I. & Safrai, V. M. Variations in filtration velocity due to random large-scale fluctuations of porosity, **37**, 1969, 371

Buzyna, George *See* Wegener & Buzyna

Bye, John A. T. Numerical solutions of the steady-state vorticity equation in rectangular basins, **26**, 1966, 577

Cade, R. & Rowe, Althea Electrokinetic flow round an elliptic cylinder in a finite fluid, **21**, 1965, 723

Callander, R. A. Instability and river channels, **36**, 1969, 465

Calvert, J. R. Experiments on the low-speed flow past cones, **27**, 1967, 273

Experiments on the flow past an inclined disk, **29**, 1967, 691

Calvert, R. T. & Melcher, J. R. Stability and dynamics of rotating dielectrophoretic equilibria, **38**, 1969, 721

Camac, Morton & Feinberg, Robert M. Thermal conductivity of argon at high temperatures, **21**, 1965, 673

Carmi, Shlomo *See* Joseph & Carmi

Carmody, Thomas *See* Sami, Carmody & Rouse

Carrier, G. F. Some effects of stratification and geometry in rotating fluids, **23**, 1965, 145

Gravity waves on water of variable depth, **24**, 1966, 641

See also Bretherton, Carrier & Longuet-Higgins

Catherall, D. & Mangler, K. W. The integration of the two-dimensional laminar boundary-layer equations past the point of vanishing skin friction, **26**, 1966, 163

Cham, T-S. & Head, M. R. Turbulent boundary-layer flow on a rotating disk, **37**, 1969, 129

Chambers, Ll. G. On long waves on a rotating earth, **22**, 1965, 209

Champagne, F. H. & Sleicher, C. A. Turbulence measurements with inclined hot-wires. Part 2. Hot-wire response equations, **28**, 1967, 177

Champagne, F. H., Sleicher, C. A. & Wehrmann, O. H. Turbulence measurements with inclined hot-wires. Part 1. Heat transfer experiments with inclined hot-wires, **28**, 1967, 153

See also Wygnanski & Champagne

Chanaud, Robert C. Observations of oscillatory motion in certain swirling flows, **21**, 1965, 111

Chang, I-Dee *See* Harper & Chang

Chang, P. C. *See* Plate, Chang & Hidy

Chang, Tien Sun & Sartory, Walter K. Hydromagnetic stability of dissipative flow between rotating permeable cylinders. Part 1. Stationary critical modes, **27**, 1967, 65

Hydromagnetic stability of dissipative flow between rotating permeable cylinders. Part 2. Oscillatory critical modes and asymptotic results, **36**, 1969, 193

Chao, J. L. & Sandborn, V. A. Evaluation of the momentum equation for a turbulent wall jet, **26**, 1966, 819

Chapman, David S. & Critchlow, P. R. Formation of vortex rings from falling drops, **29**, 1967, 177

Chapple, P. J. *See* Mellor, Chapple & Stokes

Charles, M. E. & Lilleleht, L. U. An experimental investigation of stability and interfacial waves in co-current flow of two liquids, **22**, 1965, 217

Chatwin, P. C. *See* Erdogan & Chatwin

Chen, C. F. *See* Kirchner & Chen

Chen, K. K. On two-dimensional laminar wakes and jets, **39**, 1969, 163

Chen, K. K. & Libby, Paul A. Boundary layers with small departures from the Falkner–Skan profile, **33**, 1968, 273

Chen, M. M & Whitehead, John A. Evolution of two-dimensional periodic Rayleigh convection cells of arbitrary wave-numbers, **31**, 1968, 1

See Whitehead & Chen

Chen, Shun *See also* Fox & Chen

Chen, T. S. & Sparrow, E. M. Stability of the developing laminar flow in a parallel-plate channel, **30**, 1967, 209

Chen, W. Y. *See* Van Atta & Chen

Cheng, H. K. & Kirsch, J. W. On the gas dynamics of an intense explosion with an expanding contact surface, **39**, 1969, 289

See also Lee & Cheng

Cheng, Ping & Vincenti, Walter G. Inviscid radiating flow over a blunt body, **27**, 1967, 625

Cheslak, Frank R., Nicholls, J. Arthur & Sichel, Martin Cavities formed on liquid surfaces by impinging gaseous jets, **36**, 1969, 35

Chester, W. A model of the undular bore on a viscous fluid, **24**, 1966, 367

Chester, W. & Breach, D. R. On the flow past a sphere at low Reynolds number, **37**, 1969, 751

Chisnell, R. F. A note on Whitham's rule, **22**, 1965, 103

Chopra, M. G. *See* Srivastava & Chopra

Chow, Chuen-Yen Swirling flow in tubes of non-uniform cross-sections, **38**, 1969, 843

Christer, A. H. & Helliwell, J. B. Cylindrical shock and detonation waves in magnetogasdynamics, **39**, 1969, 705

Chu, Boa-Teh *See* Wegener, Chu & Klikoff

Churchill, S. W. *See* Saville & Churchill

Chyu, W. J. *See* Davis & Chyu

Claassen, Lutz *See* Rotem & Claassen

Clarke, John F. & Rodgers, J. B. Shock waves in a gas with several relaxing internal energy modes, **21**, 1965, 591

Clarke, John F. & Stegen, G. R. Some unsteady motions of a diffusion flame sheet, **34**, 1968, 343

Clarke, N. S. On two-dimensional inviscid flow in a waterfall, **22**, 1965, 359

Two-dimensional flow under gravity in a jet of viscous liquid, **31**, 1968, 481

Cogley, A. C. The radiative driven discrete acoustic wave, **39**, 1969, 667

Cogley, A. C. & Vincenti, W. G. Application to radiative acoustics of Whitham's method for the analysis of non-equilibrium wave phenomena, **39**, 1969, 641

Cohen, Leonard S. & Hanratty, Thomas J. Effect of waves at a gas-liquid interface on a turbulent air flow, **31**, 1968, 467

Coleman, Bernard D. & Gurtin, Morton E. On the stability against shear waves of steady flows of non-linear viscoelastic fluids, **33**, 1968, 165

Coles, Donald Transition in circular Couette flow, **21**, 1965, 385

Coles, D. & Van Atta, C. Measured distortion of a laminar circular Couette flow by end effects, **25**, 1966, 513

Collins, R. A simple model of the plane gas bubble in a finite liquid, **22**, 1965, 763

A second approximation for the velocity of a large gas bubble rising in an infinite liquid, **25**, 1966, 469

The effect of a containing cylindrical boundary on the velocity of a large gas bubble in a liquid, **28**, 1967, 97

Comte-Bellot, Geneviève & Corrsin, S. The use of a contraction to improve the isotropy of grid-generated turbulence, **25**, 1966, 657

Concus, Paul Static menisci in a vertical right circular cylinder, **34**, 1968, 481

Conti, Raul A theoretical study of non-equilibrium blunt-body flows, **24**, 1966, 65

Conti, Raul & Van Dyke, Milton Inviscid reacting flow near a stagnation point, **35**, 1969, 799

Reacting flow as an example of a boundary layer under singular external conditions, **38**, 1969, 513

Cooke, J. C. *See* Horlock, Norbury & Cooke

Coombs, A. & Thornhill, C. K. An underwater explosive shock gun, **29**, 1967, 373

Cooper, M. G. *See* Kenning & Cooper

Corcos, G. M. *See* Schubert & Corcos

Corino, E. R. & Brodkey, Robert S. A visual investigation of the wall region in turbulent flow, **37**, 1969, 1

Corrsin, S. & Karweit, M. Fluid line growth in grid generated isotropic turbulence, **39**, 1969, 87

See also Comte-Bellot & Corrsin

Cousins, R. R. A note on shear flow past a sphere, **40**, 1970, 543

Cowley, M. D. & Rosenweig, R. E. The interfacial stability of a ferromagnetic fluid, **30**, 1967, 671

Cox, R. G. The steady motion of a particle of arbitrary shape at small Reynolds numbers, **23**, 1965, 625

The deformation of a drop in a general time-dependent fluid flow, **37**, 1969, 601

Cox, R. G. & Brenner, H. Effect of finite boundaries on the Stokes resistance of an arbitrary particle. Part 3. Translation and rotation, **28**, 1967, 391

Craik, Alex D. D. Wind-generated waves in thin liquid films, **26**, 1966, 369

Wind-generated waves in contaminated liquid films, **31**, 1968, 141

A note on the static stability of an elastico-viscous fluid, **33**, 1968, 33

Resonant gravity-wave interactions in a shear flow, **34**, 1968, 531

The stability of plane Couette flow with viscosity stratification, **36**, 1969, 685

Craik, Alex D. D. & Smith, F. I. P. The stability of free-surface flows with viscosity stratification, **34**, 1968, 393

Crapper, G. D. Ship waves in a stratified ocean, **29**, 1967, 667

The decay of free motion of a floating body: force coefficient at large complex frequencies, **32**, 1968, 333

Non-linear capillary waves generated by steep gravity waves, **40**, 1970, 149

Crighton, D. G. & Ffowcs Williams, J. E. Sound generation by turbulent two-phase flow, **36**, 1969, 585

Real space-time Green's functions applied to plate vibration induced by turbulent flow, **38**, 1969, 305

Crimi, P. *See* Shen & Crimi

Critchlow, P. R. *See* Chapman & Critchlow

Cross, Arthur K. & Bush, William B. Hypersonic weak interaction solutions for flow past a very slender axisymmetric body, **38**, 1969, 547
See also Bush & Cross
Crow, S. C. The spanwise perturbation of two-dimensional boundary layers, **24**, 1966, 153
Turbulent Rayleigh shear flow, **32**, 1968, 113
Viscoelastic properties of fine-grained incompressible turbulence, **33**, 1968, 1
Distortion of sonic bangs by atmospheric turbulence, **37**, 1969, 529
Csanady, G. T. The buoyant motion within a hot gas plume in a horizontal wind, **22**, 1965, 225
The effect of mean velocity variations on jet noise, **26**, 1966, 183
See also Krishnappa & Csanady; Slawson & Csanady
Cumberbatch, E. Effects of viscosity on ship waves, **23**, 1965, 471
Currie, I. G. The effect of heating rate on the stability of stationary fluids, **29**, 1967, 337

Datta, Subhendu K. Stability of spiral flow between concentric circular cylinders at low axial Reynolds number, **21**, 1965, 635
Davey, A. The motion of a fluid due to a moving source of heat at the bottom, **29**, 1967, 137
Davey, A., Di Prima, R. C. & Stuart, J. T. On the instability of Taylor vortices, **31**, 1968, 17
Davey, A. & Drazin, P. G. The stability of Poiseuille flow in a pipe, **36**, 1969, 209
Davey, A. & Schofield, D. Three-dimensional flow near a two-dimensional stagnation point, **28**, 1967, 149
See also Gaster & Davey; Gill & Davey; Schofield & Davey
Davidson, J. F., Pearson, J. R. A. & Vanoni, V. A. Report on the I.U.T.A.M. Symposium on the flow of fluid-solid mixtures, **39**, 1969, 375
See also Shearer & Davidson
Davies, H. G. & Ffowcs Williams, J. E. Aerodynamic sound generation in a pipe, **32**, 1968, 765
Davies, M. H. *See* Beard, Davies & Walters
Davies, W. R. & Bernstein, L. Heat transfer and transition to turbulence in the shock-induced boundary layer on a semi-infinite flat plate, **36**, 1969, 87
Davis, Russ E. The two-dimensional flow of a stratified fluid over an obstacle, **36**, 1969, 127
On the high Reynolds number flow over a wavy boundary, **36**, 1969, 337
Davis, Russ E. & Acrivos, Andreas Solitary internal waves in deep water, **29**, 1967, 593
The stability of oscillatory internal waves, **30**, 1967, 723
Davis, R. T. Laminar incompressible flow past a semi-infinite flat plate, **27**, 1967, 691
Davis, R. T. & Chyu, W. J. Laminar flow past a sphere at high Mach number, **24**, 1966, 481
See also Werle & Davis

Davis, Stephen H. Convection in a box: linear theory, **30**, 1967, 465
Convection in a box: on the dependence of preferred wave number upon the Rayleigh number at finite amplitude, **32**, 1968, 619
Buoyancy surface tension instability by the method of energy, **39**, 1969, 347
Deardorff, J. W. & Willis, G. E. The effect of two-dimensionality on the suppression of thermal turbulence, **23**, 1965, 337
Investigation of turbulent thermal convection between horizontal plates, **28**, 1967, 675
Deardorff, J. W., Willis, G. E. & Lilly, D. K. Laboratory investigation of non-steady penetrative convection, **35**, 1969, 7
Debler, Walter R. On the analogy between thermal and rotational hydrodynamic stability, **24**, 1966, 165
Demetriades, Anthony Turbulent front structure of an axisymmetric compressible wake, **34**, 1968, 465
Dennis, S. C. R. & Dunwoody, J. The steady flow of a viscous fluid past a flat plate, **24**, 1966, 577
Dennis, S. C. R. & Smith, N. Forced convection from a heated flat plate, **24**, 1966, 509
Deplomb, E. P. *See* Olfe & Deplomb
Deshpande, S. M. & Narasimha, R. The Boltzmann collision integrals for a combination of Maxwellians, **36**, 1969, 545
See also Narasimha & Deshpande
DeSilva, C. N. *See* Allen & DeSilva
Dimopoulos, Harry G. & Hanratty, Thomas J. Velocity gradients at the wall for flow around a cylinder for Reynolds numbers between 60 and 360, **33**, 1968, 303
Di Prima, R. C. *See* Davey, Di Prima & Stuart; Krueger, Gross & Di Prima
Dobrovol'skaya, Z. N. On some problems of similarity flow of fluid with a free surface, **36**, 1969, 805
Dodson, David S. *See* Fendell, Sprankle & Dodson
Donnelly, Russell J. *See* Maki, Kuzma & Donnelly
Dore, B. D. Mass transport in layered fluid systems, **40**, 1970, 113
Dowell, E. H. Non-linear theory of unstable plane Poiseuille flow, **38**, 1969, 401
Drazin, P. G. Non-linear internal gravity waves in a slightly stratified atmosphere, **36**, 1969, 433
Drazin, P. G. & Moore, D. W. Steady two-dimensional flow of fluid of variable density over an obstacle, **28**, 1967, 353
See also Davey & Drazin; Gill & Drazin
Driessche, P. van den The effect of a non-linear basic temperature profile on the forced flow of a viscous liquid non-uniformly heated from below, **23**, 1965, 385
Dring, R. P. & Gebhart, B. A theoretical investigation of disturbance amplification in external laminar natural convection, **34**, 1968, 551
An experimental investigation of disturbance amplification in external laminar natural convection flow, **36**, 1969, 447

Drummond, J. E. Propulsion by oscillating sheets and tubes in a viscous fluid, **25**, 1966, 787

Duncan, Iain B. Axisymmetric convection between two rotating disks, **24**, 1966, 417

Dunham, J. A theory of circulation control by slot-blowing, applied to a circular cylinder, **33**, 1968, 495

Dunwoody, J. High-frequency sound waves in ideal gases with internal dissipation, **34**, 1968, 769

See also Dennis & Dunwoody

Eagles, P. M. The stability of a family of Jeffrey–Hamel solutions for divergent channel flow, **24**, 1966, 191

Edney, B. E. Temperature measurements in a hypersonic gun tunnel using heat-transfer methods, **27**, 1967, 503

Edwards, D. H., Parry, D. J. & Jones, A. T. The structure of the wave front in spinning detonation, **26**, 1966, 321

Elder, J. W. Laminar free convection in a vertical slot, **23**, 1965, 77

Turbulent free convection in a vertical slot, **23**, 1965, 99

Numerical experiments with free convection in a vertical slot, **24**, 1966, 823

Steady free convection in a porous medium heated from below, **27**, 1967, 29

Transient convection in a porous medium, **27**, 1967, 609

The unstable thermal interface, **32**, 1968, 69

The temporal development of a model of high Rayleigh number convection, **35**, 1969, 417

Eller, Anthony & Flynn, H. G. The equilibrium and stability of a translating cavity in a liquid, **30**, 1967, 785

Ellingsen, T., Gjevik, B. & Palm, E. On the non-linear stability of plane Couette flow, **40**, 1970, 97

See also Palm, Ellingsen & Gjevik

Ellinwood, John Webster & Mirels, Harold Axisymmetric hypersonic flow with strong viscous interaction, **34**, 1968, 687

Ellis, H. S. *See* Kruyer, Redberger & Ellis

Enlow, R. L. *See* Willmarth & Enlow

Erdoğan, M. Emin & Chatwin, P. C. The effects of curvature and buoyancy on the laminar dispersion of solute in a horizontal tube, **29**, 1967, 465

Ericksen, J. L. Twisting of liquid crystals, **27**, 1967, 59

Escudier, M. P. & Nicoll, W. B. The entrainment function in turbulent boundary-layer and wall-jet calculations, **25**, 1966, 337

Espig, H. & Hoyle, R. The thickness of water film beneath the crests of waves in a thin isothermal liquid layer on a rotating disk, **22**, 1965, 671

Evans, D. V. Diffraction of water waves by a submerged vertical plate, **40**, 1970, 433

Fabula, A. G. The dynamic response of towed thermometers, **34**, 1968, 449

Fay, James A. & Kemp, Nelson H. Theory of heat transfer to a shock-tube end-wall from an ionized monatomic gas, **21**, 1965, 659

See also Sajben & Fay

Feinberg, Robert M. *See* Camac & Feinberg
Feir, J. E. *See* Benjamin & Feir
Fejer, A. A. *See* Obremski & Fejer
Feldman, Guili A. & Brenner, Howard Experiments on the pressure drop created by a sphere settling in a viscous liquid. Part 2. Reynolds numbers from 0·2 to 21,000, **32**, 1968, 705
Fendell, Francis E. Ignition and extinction in combustion of initially unmixed reactants, **21**, 1965, 281
Laminar natural convection about an isothermally heated sphere at small Grashof number, **34**, 1968, 163
Fendell, Francis E., Sprankle, Maureen, L. & Dodson, David S. Thin-flame theory for a fuel droplet in slow viscous flow, **26**, 1966, 267
Fernholz, H. *See* Wille & Fernholz
Ferriss, D. H. *See* Bradshaw, Ferriss & Atwell
Ffowcs Williams, J. E. On the development of Mach waves radiated by small disturbances, **22**, 1965, 49
Sound radiation from turbulent boundary layers formed on compliant surfaces, **22**, 1965, 347
Surface pressure fluctuations induced by boundary-layer flow at finite Mach number, **22**, 1965, 507
The influence of simple supports on the radiation from turbulent flow near a plane compliant surface, **26**, 1966, 641
Ffowcs Williams, J. E. & Hall, L. H. Aerodynamic sound generation by turbulent flow in the vicinity of a scattering half plane, **40**, 1970, 657
Ffowcs Williams, J. E. & Hawkings, D. L. Shallow water wave generation by unsteady flow, **31**, 1968, 779
Ffowcs Williams, J. E. & Maidanik, G. The Mach wave field radiated by supersonic turbulent shear flows, **21**, 1965, 641
Ffowcs Williams, J. E., Rosenblat, S. & Stuart, J. T. Transition from laminar to turbulent flow, **39**, 1969, 547
See also Crighton & Ffowcs Williams; Davies & Ffowcs Williams
Fiedler, H. & Head, M. R. Intermittency measurements in the turbulent boundary layer, **25**, 1966, 719
See also Wygnanski & Fiedler
Finlayson, B. A. The Galerkin method applied to convective instability problems, **33**, 1968, 201
Convective instability of ferromagnetic fluids, **40**, 1970, 753
See also McConaghy & Finlayson
Finley, P. J. The flow of a jet from a body opposing a supersonic free stream, **26**, 1966, 337
Fisher, M. J. & Krause, F. R. The crossed-beam correlation technique, **28**, 1967, 705
Fitzhugh, Henry A. Numerical studies of the laminar boundary layer for Mach numbers up to 15, **36**, 1969, 347
Fletcher, B. Mass transfer from an axial source in a turbulent radial wall jet, **30**, 1967, 1

Flynn, H. G. *See* Eller & Flynn

Foster, Theodore D. The effect of initial conditions and lateral boundaries on convection, **37**, 1969, 81

Fox, Herbert & Chen, Shun Some remarks on 'Perturbation solutions in laminar boundary theory', **25**, 1966, 199

Fox, J. A. *See* Lessen, Fox & Zien

Fraenkel, L. E. On Benjamin's theory of conjugate vortex flows, **28**, 1967, 85

Fraim, Freeman W. & Heiser, William H. The effect of a strong longitudinal magnetic field on the flow of mercury in a circular tube, **33**, 1968, 397

Frater, K. R. Acoustic streaming in an elastico–viscous fluid, **30**, 1967, 689

Freeman, N. C. & Grundy, R. E. On the solution of the Boltzmann equation for an unsteady cylindrically symmetric expansion of a monatomic gas into a vacuum, **31**, 1968, 723

Freymuth, Peter On transition in a separated laminar boundary layer, **25**, 1966, 683

Fung, Y. C. *See* Lee & Fung

Gadd, G. E. & Grant, S. Some experiments on cavities behind disks, **23**, 1965, 645

Gage, K. S. & Reid, W. H. The stability of thermally stratified plane Poiseuille flow, **33**, 1968, 21

Galea, P. V. *See* Bradshaw & Galea

Galloway, A. J. *See* Willmarth, Hawk, Galloway & Roos

Garrett, C. J. R. On the interaction between internal gravity waves and a shear flow, **34**, 1968, 711

Garrison, C. J. On the interaction of an infinite shallow draft cylinder oscillating at the free surface with a train of oblique waves, **39**, 1969, 227

Gartshore, Ian S. An experimental examination of the large-eddy equilibrium hypothesis, **24**, 1966, 89

Two-dimensional turbulent wakes, **30**, 1967, 547

Garvine, Richard W. *See* Weinbaum & Garvine

Gaster, M. On the generation of spatially growing waves in a boundary layer, **22**, 1965, 433

The development of three-dimensional wave packets in a boundary layer, **32**, 1968, 173

Vortex shedding from slender cones at low Reynolds numbers, **38**, 1969, 565

Gaster, M. & Davey, A. The development of three-dimensional wave packets in unbounded parallel flows, **32**, 1968, 801

Gebhart, B. & Mollendorf, J. Viscous dissipation in external natural convection flows, **38**, 1969, 97

See also Dring & Gebhart; Hieber & Gebhart; Knowles & Gebhart; Polymeropoulos & Gebhart

Gerber, Nathan *See* Sedney & Gerber

Gerrard, J. H. A disturbance–sensitive Reynolds number range of the flow past a circular cylinder, **22**, 1965, 187

The three-dimensional structure of the wake of a circular cylinder, **25**, 1966, 143

The mechanics of the formation region of vortices behind bluff bodies, **25**, 1966, 401

Gessner, F. B. & Jones, J. B. On some aspects of fully developed turbulent flow in rectangular channels, **23**, 1965, 689

Gibson, D. M. *See* Mellor & Gibson

Giesing, Joseph P. & Smith, A. M. O. Potential flow about two-dimensional hydrofoils, **28**, 1967, 113

Gilbert, Freeman *See* Miles & Gilbert

Gilchrist, Alastair *See* Neilson & Gilchrist

Gilchrist, A. W. R. The directional spectrum of ocean waves: an experimental investigation of certain predictions of the Miles–Phillips theory of wave generation, **25**, 1966, 795

Gill, A. E. On the behaviour of small disturbances to Poiseuille flow in a circular pipe, **21**, 1965, 145

A mechanism for instability of plane Couette flow and of Poiseuille flow in a pipe, **21**, 1965, 503

The boundary-layer regime for convection in a rectangular cavity, **26**, 1966, 515

A linear model of the Antarctic circumpolar current, **32**, 1968, 465

A proof that convection in a porous vertical slab is stable, **35**, 1969, 545

Gill, A. E. & Davey, A. Instabilities of a buoyancy-driven system, **35**, 1969, 775

Gill, A. E. & Drazin, P. G. Note on instability of compressible jets and wakes to long-wave disturbances, **22**, 1965, 415

See also Baines & Gill

Gille, John Interferometric measurements of temperature gradient reversal in a layer of convecting air, **30**, 1967, 371

Gjevik, B. *See* Palm, Ellingsen & Gjevik; Ellingsen, Gjevik & Palm

Goddard, J. D. & Acrivos, Andreas Asymptotic expansions for laminar forced-convection heat and mass transfer. Part 2. Boundary-layer flows, **24**, 1966, 339

Goddard, J. D. & Miller, Chester Nonlinear effects in the rheology of dilute suspensions, **28**, 1967, 657

See also Acrivos & Goddard

Goedde, E. F. & Yuen, M. C. Experiments on liquid jet instability, **40**, 1970, 495

Goldin, Michael, Yerushalmi, Joseph, Pfeffer, Robert & Shinnar, Reuel Breakup of a laminar capillary jet of viscoelastic fluid, **38**, 1969, 689

Goldman, Edward & Sirovich, Lawrence The structure of shock-waves in gas mixtures, **35**, 1969, 575

Goldstein, Sydney On backward boundary layers and flow in converging passages, **21**, 1965, 33

Goldsworthy, F. A. On the motion established by a constant energy explosion followed by an expanding piston, **38**, 1969, 25

Good, M. C. & Joubert, P. N. The form drag of two-dimensional bluff-plates immersed in turbulent boundary layers, **31**, 1968, 547

Gordon, A. R. & Helliwell, J. B. Magnetogasdynamic deflagration under the Chapman–Jouguet condition, **23**, 1965, 779

Goren, Simon L. Development of the boundary layer at a free surface from a uniform shear flow, **25**, 1966, 87

Goren, Simon L. & Wronski, Stanislaw The shape of low-speed capillary jets of Newtonian liquids, **25**, 1966, 185

Gottifredi, J. C. & Jameson, G. J. The suppression of wind-generated waves by a surface film, **32**, 1968, 609

Gough, D. O. & Lynden-Bell, D. Vorticity expulsion by turbulence: astrophysical implications of an Alka-Seltzer experiment, **32**, 1968, 437

Graber, B. C. *See* Nagamutsu, Graber & Sheer

Gradowczyk, Mario H. Wave propagation and boundary instability in erodible-bed channels, **33**, 1968, 93

Graebel, W. P. On determination of the characteristic equations for the stability of parallel flows, **24**, 1966, 497

Graebel, W. P., Long, R. R. & Wu, T. Y. T. Report on the international conference on stratified fluids, **31**, 1968, 689

Granger, Robert Steady three-dimensional vortex flow, **25**, 1966, 557

Speed of a surge in a bathtub vortex, **34**, 1968, 651

Grant, H. L., Hughes, B. A., Vogel, W. M. & Moilliet, A. The spectrum of temperature fluctuations in turbulent flow, **34**, 1968, 423

Grant, H. L., Moilliet, A. & Vogel, W. M. Some observations of the occurrence of turbulence in and above the thermocline, **34**, 1968, 443

Grant, S. *See* Gadd & Grant

Green, J. E. The prediction of turbulent boundary layer development in compressible flow, **31**, 1968, 753

Reflexion of an oblique shock wave by a turbulent boundary layer, **40**, 1970, 81

Green, T. & Street, R. L. Two supercavitating hydrofoils near a free surface, **27**, 1967, 1

Greenspan, H. P. On the general theory of contained rotating fluid motions, **22**, 1965, 449

On the non-linear interaction of inertial modes, **36**, 1969, 257

See also Pedlosky & Greenspan

Greenstein, T. & Happel, J. Theoretical study of the slow motion of a sphere and a fluid in a cylindrical tube, **34**, 1968, 705

Gresho, P. M. & Sani, R. L. The effects of gravity modulation on the stability of a heated fluid layer, **40**, 1970, 783

Griffith, Wayland C. *See* Bershader & Griffith

Griffiths, D. F., Jones, D. T. & Walters, K. A flow reversal due to edge effects, **36**, 1969, 161

Grimshaw, R. A note on the steady two-dimensional flow of a stratified fluid over an obstacle, **33**, 1968, 293

On steady recirculating flows, **39**, 1969, 695

Grosch, Chester E. & Salwen, Harold The stability of steady and time-dependent plane Poiseuille flow, **34**, 1968, 177

Gross, A. *See* Krueger, Gross & Di Prima

Grove, A. S. *See* Acrivos, Snowden, Grove & Petersen

Grundy, R. E. Unsteady expansions into vacuum with spherical symmetry, **39**, 1969, 529

See also Freeman & Grundy

Gupta, A. K., Landahl, M. T. & Mollo-Christensen, E. L. Experimental and theoretical investigation of the stability of air flow over a water surface, **33**, 1968, 673

Gupta, A. S. Stability of a visco-elastic liquid film flowing down an inclined plane, **28**, 1967, 17

Gupta, A. S. & Rai, Lajpat Note on the stability of a visco-elastic liquid film flowing down an inclined plane, **33**, 1968, 87

Gurtin, Morton E. *See* Coleman & Gurtin

Hahn, Mansop Pressure distribution and mass injection effects in the transitional separated flow over a spiked body at supersonic speed, **24**, 1966, 209

Hall, L. H. *See* Ffowcs Williams & Hall

Hamzah, A. M. O. *See* Johns & Hamzah

Handelsman, Richard A. & Keller, Joseph B. Axially symmetric potential flow around a slender body, **28**, 1967, 131

Hanratty, Thomas J. *See* Cohen & Hanratty; Dimopoulos & Hanratty; Karabelas & Hanratty; Mitchell & Hanratty; Son & Hanratty

Hanson, F. B., Kozak, S. H. & Richardson, P. D. Velocity spikes in separated flows, **25**, 1966, 43

Happel, J. *See* Greenstein & Happel

Harpavat, G. *See* Lessen, Harpavat & Zien

Harper, E. Y. & Chang, I-Dee Maximum dissipation resulting from lift in slow viscous shear flow, **33**, 1968, 209

Harper, J. F. & Moore, D. W. The motion of a spherical liquid drop at high Reynolds number, **32**, 1968, 367

Harper, J. F., Moore, D. W. & Pearson, J. R. A. The effect of the variation of surface tension with temperature on the motion of bubbles and drops, **27**, 1967, 361

Harrington, Jill A. & Johnson, J. A. A note on the buoyancy layer in a rotating stratified fluid, **39**, 1969, 640

Harvey, J. K. *See* Tunstall & Harvey

Hasen, E. M. A non-linear theory of turbulence onset in a shear flow, **29**, 1967, 721

Hasselmann, K. A criterion for non-linear wave stability, **30**, 1967, 737

Hawk, N. E. *See* Willmarth, Hawk, Galloway & Roos

Hawkings, D. L. *See* Ffowcs Williams & Hawkings

Hayasi, Nisiki Similarity of the two-dimensional and antisymmetric boundary-layer flows for purely viscous non-Newtonian fluids, **23**, 1965, 293

Hayes, Wallace D. Self-similar strong shocks in an exponential medium, **32**, 1968, 305

The propagation upward of the shock wave from a strong explosion in the atmosphere, **32**, 1968, 317

Hazel, Philip The effect of viscosity and heat conduction on internal gravity waves at a critical level, **30**, 1967, 775

Head, M. R. *See* Cham & Head; Fiedler & Head; Patel & Head

Heiser, W. H. & Shercliff, J. A. A simple demonstration of the Hartmann layer, **22**, 1965, 701

See also Fraim & Heiser

Helliwell, J. B. Self similar piston problems with radiative heat transfer, **37**, 1969, 497

See also Christer & Helliwell; Gordon & Helliwell

Hendershott, Myrl C. Impulsively started oscillations in a rotating stratified fluid, **36**, 1969, 513

Henderson, L. F. The refraction of a plane shock wave at a gas interface, **26**, 1966, 607

On expansion waves generated by the refraction of a plane shock at a gas interface, **30**, 1967, 385

The reflexion of a shock wave at a rigid wall in the presence of a boundary layer, **30**, 1967, 699

On shock impedance, **40**, 1970, 719

Henderson, L. F. & Macpherson, A. K. On the irregular refraction of a plane at a Mach number interface, **32**, 1968, 185

Herbert, D. M. A laminar jet in a rotating fluid, **23**, 1965, 65

Herring, H. J. & Norbury, J. F. Some experiments on equilibrium turbulent boundary layers in favourable pressure gradients, **27**, 1967, 541

Hide, R. On source-sink flows in a rotating fluid, **32**, 1968, 737

On hydromagnetic waves in a stratified rotating incompressible fluid, **39**, 1969, 283

Hide, R., Ibbetson, A. & Lighthill, M. J. On slow transverse flow past obstacles in a rapidly rotating fluid, **32**, 1968, 251

Hide, R. & Titman, C. W. Detached shear layers in a rotating fluid, **29**, 1967, 39

Hidy, G. M. & Plate, E. J. Wind action on water standing in a laboratory channel, **26**, 1966, 651

See also Plate, Chang & Hidy

Hieber, C. A. & Gebhart, B. Low Reynolds number heat transfer from a circular cylinder, **32**, 1968, 21

Mixed convection from a sphere at small Reynolds and Grashof numbers, **38**, 1969, 137

Hill, M. G. *See* Howland, Springer & Hill

Hill, Philip G. Turbulent jets in ducted streams, **22**, 1965, 161

Condensation of water vapour during supersonic expansion in nozzles, **25**, 1966, 593

Hine, R. J. *See* Hodgson & Hine

Hino, Mikio Equilibrium-range spectra of sand waves formed by flowing water, **34**, 1968, 565

Hinwood, J. B. The stability of a stratified fluid, **29**, 1967, 233

Hocking, L. M. Note on the instability of a non-uniform vortex sheet, **21**, 1965, 333

Long wave-length disturbances to non-planar parallel flows, **31**, 1968, 625

Hodgson, J. P. & Hine, R. J. Measurement of the relaxation frequency of the asymmetric stretching mode of carbon dioxide, **35**, 1969, 171

Hodgson, T. H. *See* McGoldrick, Phillips, Huang & Hodgson

Hodnett, P. F. Low Reynolds number flow of a variable property gas past a heated circular cylinder, **39**, 1969, 465

Holton, James R. & Stone, Peter H. A note on the spin-up of a stratified fluid, **33**, 1968, 127

Homsy, G. M. & Hudson, J. L. Centrifugally driven thermal convection in a rotating cylinder, **35**, 1969, 33

Honda, M. & Kiyokawa, Y. An analysis of second-order effects on laminar boundary-layer flow, **35**, 1969, 145

Hopkins, D. F. & Robertson, J. M. Two-dimensional incompressible fluid jet penetration, **29**, 1967, 273

Horlock, J. H., Norbury, J. F. & Cooke, J. C. Three-dimensional boundary layers: a report on Euromech 2, **27**, 1967, 369

Horlock, J. H. & Wordsworth, J. The three-dimensional laminar boundary layer on a rotating helical blade, **23**, 1965, 305

Hornung, H. G. Inviscid hypersonic flow over plane power-law bodies, **27**, 1967, 315

Some aspects of hypersonic flow over power law bodies, **39**, 1969, 143

Hottel, H. C. *See* Becker, Hottel & Williams

Howe, M. S. Non-linear theory of open-channel steady flow past a solid surface of finite-wave-group shape, **30**, 1967, 497

Phase jumps, **32**, 1968, 779

Howland, B., Springer, G. S. & Hill, M. G. Use of electrochemiluminescence in visualizing separated flows, **24**, 1966, 697

Hoyle, R. & Matthews, D. H. The effect of speed on the condensate layer on a cold cylinder rotating in a steam atmosphere, **22**, 1965, 105

See also Espig & Hoyle

Hsu, Chen-Chi Viscoelastic flow past a wedge with a soluble coating, **27**, 1967, 445

Hsu, En Yun *See* Bole & Hsu; Shemdin & Hsu

Huang, N. E. *See* McGoldrick, Phillips, Huang & Hodgson

Hudson, J. L. *See* Homsy & Hudson

Huebner, A. L. Disintegration of charged liquid jets, **38**, 1969, 679

Hughes, B. A. *See* Grant, Hughes, Vogel & Moilliet

Hughes, T. H. & Reid, W. H. On the stability of the asymptotic suction boundary-layer profile, **23**, 1965, 715

The stability of laminar boundary layers at separation, **23**, 1965, 737

Hung, Tin-Kan *See* Macagno & Hung

Hunt, Bruce W. Numerical solution of an integral equation for flow from a circular orifice, **31**, 1968, 361

Hunt, J. C. R. Magnetohydrodynamic flow in rectangular ducts, **21**, 1965, 577

Hunt, J. C. R. & Leibovich, S. Magnetohydrodynamic flow in channels of variable cross-section with strong transverse magnetic fields, **28**, 1967, 241

Hunt, J. C. R. & Ludford, G. S. S. Three-dimensional MHD duct flows with strong transverse magnetic fields. Part 1. Obstacles in a constant area channel, **33**, 1968, 693

Hunt, J. C. R. & Malcolm, D. G. Some electrically driven flows in magnetohydrodynamics. Part 2. Theory and experiment, **33**, 1968, 775

Hunt, J. C. R. & Stewartson, K. Magnetohydrodynamic flow in rectangular ducts. Part 2, **23**, 1965, 563

Some electrically driven flows in magnetohydrodynamics. Part 3. The asymptotic theory for flow between circular electrodes, **38**, 1969, 225

Hunt, J. C. R. & Williams, W. E. Some electrically driven flows in magnetohydrodynamics, **31**, 1968, 705

Hunter, C. The axisymmetric flow in a rotating annulus due to a horizontally applied temperature gradient, **27**, 1967, 753

Huppert, H. E. On Kelvin–Helmholtz instability in a rotating fluid, **33**, 1968, 353

Huppert, H. E. & Miles, J. W. A note on shock diffraction by a supersonic wedge, **31**, 1968, 455

Lee waves in a stratified flow. Part 3. Semi-elliptical obstacle, **35**, 1969, 481

See also Miles & Huppert

Hurley, D. G. The emission of internal waves by vibrating cylinders, **36**, 1969, 657

Husar, R. B. *See* Sparrow & Husar

Hutt, P. K. *See* Thorpe, Hutt & Soulsby

Ibbetson, A. *See* Hide, Ibbetson & Lighthill

Inger, George R. Nearly-equilibrium dissociating boundary layer flows by the method of matched asymptotic expansions, **26**, 1966, 793

Ingersoll, Andrew P. Thermal convection with shear at high Rayleigh number, **25**, 1966, 209

Ingham, D. B. Dual solutions of the magnetogasdynamic boundary-layer equations, **27**, 1967, 145

Note on the numerical solution for unsteady viscous flow past a circular cylinder, **31**, 1968, 815

Ives, J. *See* Ortloff & Ives

Jacobs, Stanley J. An asymptotic solution of the tidal equations, **30**, 1967, 417

Jaffrin, M. Y. *See* Shapiro, Jaffrin & Weinberg

Jameson, G. J. *See* Gottifredi & Jameson

Jandali, T. *See* Parkinson & Jandali

Janowitz, G. S. On wakes in stratified fluids, **33**, 1968, 417

Jayaweera, K. O. L. F. & Mason, B. J. The behaviour of freely falling cylinders and cones in a viscous fluid, **22**, 1965, 709

Jeffrey, R. C. & Pearson, J. R. A. Particle motion in laminar vertical tube flow, **22**, 1965, 721

Jeng, Dah-Teng *See* Meecham & Jeng

Jeppson, Roland W. Inverse formulation and finite difference solution for flow from a circular orifice, **40**, 1970, 215

Jeromin, L. O. F. A transformation for compressible turbulent boundary layers with air injection, **31**, 1968, 65

Johannesen, N. H., Bird, G. A. & Zienkiewicz, H. K. Theoretical and experimental investigations of the reflexion of normal shock waves with vibrational relaxation, **30**, 1967, 51

Johns, B. & Hamzah, A. M. O. Long standing waves in a curved canal, **34**, 1968, 759

Johnson, J. A. The diffusion of a viscous vortex ring in a rotating fluid, **24**, 1966, 753

A three-dimensional model of the wind-driven ocean circulation, **34**, 1968, 721

See also Harrington & Johnson

Jones, A. F. The model of a single infinite disk oscillating about a state of steady rotation, **39**, 1969, 257

The resonance effect of a disk oscillating about a state of steady rotation, **39**, 1969, 269

Jones, A. F. & Rosenblat, S. The flow induced by torsional oscillations of infinite planes, **37**, 1969, 337

Jones, A. T. *See* Edwards, Parry & Jones

Jones, D. T. *See* Griffiths, Jones & Walters

Jones, Ian S. F. Aerodynamic noise dependent on mean shear, **33**, 1968, 65

Fluctuating turbulent stresses in the noise-producing region of a jet, **36**, 1969, 529

Jones, J. B. *See* Gessner & Jones

Jones, Walter L. Propagation of internal gravity waves in fluids with shear flow and rotation, **30**, 1967, 439

Reflexion and stability of waves in stably stratified fluids with shear flow: a numerical study, **34**, 1968, 609

Jones, W. P. *See* Launder & Jones

Jonsson, V. K. & Sparrow, E. M. Experiments on turbulent-flow phenomena in eccentric annular ducts, **25**, 1966, 65

Joseph, Daniel D. Eigenvalue bounds for the Orr–Sommerfeld equation, **33**, 1968, 617

Eigenvalue bounds for the Orr–Sommerfeld equation. Part 2, **36**, 1969, 721

Joseph, Daniel D. & Carmi, Shlomo Sub-critical convective instability. Part 2. Spherical shells, **26**, 1966, 769

Joseph, Daniel D. & Shir, C. C. Sub-critical convective instability. Part 1. Fluid layers, **26**, 1966, 753

See also Beavers & Joseph

Joubert, P. N. *See* Brown & Joubert; Good & Joubert; Perry & Joubert; Perry, Bell & Joubert; Perry, Schofield & Joubert

Kahn, F. D. Space-charge waves carried by a plasma trapped in a potential well, **21**, 1965, 705

Kaloni, P. N. On the flow of certain orientable fluids between two co-axial cones, **23**, 1965, 511

Kamimoto, G. & Nishida, M. Induction velometry in a shock wave, **40**, 1970, 481

Kao, Hsiao C. An analytic approach to the method of series truncation for the supersonic blunt-body problem, **27**, 1967, 789

Kao, Timothy W. A free-streamline solution for stratified flow into a line sink, **21**, 1965, 535

Role of viscosity stratification in the stability of two-layer flow down an incline, **33**, 1968, 561

Karabelas, Anastasius J. & Hanratty, Thomas J. Determination of the direction of surface velocity gradients in three-dimensional boundary layers, **34**, 1968, 159

Karweit, M. *See* Corrsin & Karweit

Kato, H. & Phillips, O. M. On the penetration of a turbulent layer into stratified fluid, **37**, 1969, 643

Keffer, J. F. The uniform distortion of a turbulent wake, **22**, 1965, 135

A note on the expansion of turbulent wakes, **28**, 1967, 183

Keller, Joseph B. Periodic oscillations in a model of thermal convection, **26**, 1966, 599

Keller, Joseph B. & Mow, Van C. Internal wave propagation in an inhomogeneous fluid of non-uniform depth, **38**, 1969, 365

Keller, Joseph B., Rubenfeld, Lester A. & Molyneux, John E. Extremum principles for slow viscous flows with applications to suspensions, **30**, 1967, 97

See also Handelsman & Keller

Kelly, R. E. The stability of unsteady Kelvin–Helmholtz flow, **22**, 1965, 547

On the stability of an inviscid shear layer which is periodic in space and time, **27**, 1967, 657

On the resonant interaction of neutral disturbances in two inviscid shear flows, **31**, 1968, 789

Wave diffraction in a two-fluid system, **36**, 1969, 65

Kemp, Nelson H. *See* Fay & Kemp

Kennedy, Lawrence A. The steady state exothermal hydromagnetic discontinuity for an arbitrarily orientated magnetic field, **24**, 1966, 177

Kenning, D. B. R. & Cooper, M. G. Interfacial circulation due to surface-active agents in steady two-phase flows, **24**, 1966, 293

Kim, W. D. On the harmonic oscillations of a rigid body on a free surface, **21**, 1965, 427

Kirchner, R. P. & Chen, C. F. Stability of time-dependent rotational Couette flow. Part 1. Experimental investigation, **40**, 1970, 39

Kirsch, J. W. *See* Cheng & Kirsch

Kistler, A. L. & Vrebalovich, T. Grid turbulence at large Reynolds numbers, **26**, 1966, 37

Kiyokawa, Y. *See* Honda & Kiyokawa

Klikoff, W. A. *See* Wegener, Chu & Klikoff

Kline, S. J., Moffatt, H. K. & Morkovin, M. V. Report on the AFOSR-IFP-Stanford conference on computation of turbulent boundary layers, **36**, 1969, 481

Kline, S. J., Reynolds, W. C., Schraub, F. A. & Runstadler, P. W. The structure of turbulent boundary layers, **30**, 1967, 741

Klozenberg, J. P., McNamara, B. & Thonemann, P. C. The dispersion and attenuation of helicon waves in a uniform cylindrical plasma, **21**, 1965, 545

Knowles, C. P. & Gebhart, B. The stability of the laminar natural convection boundary layer, **34**, 1968, 657

Ko, Sung-Hwan On the stability of plane Poiseuille flow with a finite conductivity in an aligned magnetic field, **33**, 1968, 433

Koh, Robert C. Y. Viscous stratified flow towards a sink, **24**, 1966, 555

Koopmann, G. H. The vortex wakes of vibrating cylinders at low Reynolds numbers, **28**, 1967, 501

Koschmieder, E. L. On convection under an air surface, **30**, 1967, 9

On convection on a non-uniformly heated, rotating plane, **33**, 1968, 515

On the wavelength of convective motions, **35**, 1969, 527

Kovitz, A. A. *See* Briscoe & Kovitz

Kozak, S. H. *See* Hanson, Kozak & Richardson

Kozlov, L. F. Optimal suction of the boundary layer taking account of initial turbulence and surface roughness, **31**, 1968, 53

Krause, F. R. *See* Fisher & Krause

Kreith, Frank & Sonju, O. K. The decay of a turbulent swirl in a pipe, **22**, 1965, 257

Krishna, D. V. & Sarma, L. V. Motion of an axisymmetric body in a rotating stratified fluid confined between two parallel plates, **38**, 1969, 833

Krishnamurti, Ruby Finite amplitude convection with changing mean temperature. Part 1. Theory, **33**, 1968, 445

Finite amplitude convection with changing mean temperature. Part 2. An experimental test of the theory, **33**, 1968, 457

Krishnappa, G. & Csanady, G. T. An experimental investigation of the composition of jet noise, **37**, 1969, 149

Kroll, John & Veronis, George The spin-up of a homogeneous fluid bounded below by a permeable medium, **40**, 1970, 225

Kronauer, R. E. *See* Morrison & Kronauer

Krueger, E. R., Gross, A. & Di Prima, R. C. On the relative importance of Taylor-vortex and non-axisymmetric modes in flow between rotating cylinders, **24**, 1966, 521

Kruyer, Jan, Redberger, P. J. & Ellis, H. S. The pipeline flow of capsules. Part 9, **30**, 1967, 513

Kubota, T. *See* Ru-Sue Ko, Kubota & Lees

Küchemann, D. Report on the I.U.T.A.M. symposium on concentrated vortex motions in fluids, **21**, 1965, 1

Kuerti, G. *See* Ban & Kuerti

Kuiken, H. K. Free convection at low Reynolds numbers, **37**, 1969, 785

Magnetohydrodynamic free convection in a strong cross field, **40**, 1970, 21

Kuo, Yung-Huang & Baldwin, Lionel V. The formation of elliptical wakes, **27**, 1967, 353

Küppers, G. & Lortz, D. Transition from laminar convection to thermal turbulence in a rotating fluid layer, **35**, 1969, 609

Kurtz, E. F. *See* Tsou, Sparrow & Kurtz

Kuzma, Dennis C. *See* Maki, Kuzma & Donnelly

Lahey, F. J. *See* Brand & Lahey

Lambert, R. B. *See* Snyder & Lambert

Landahl, M. T. A wave-guide model for turbulent shear flow, **29**, 1967, 441

See also Gupta, Landahl & Mollo-Christensen

Lange, C. G. *See* Newell, Lange & Aucoin

Larock, Bruce E. Jets from two-dimensional symmetric nozzles of arbitrary shape, **37**, 1969, 479

Larock, Bruce E. & Street, Robert L. A non-linear theory for a full cavitating hydrofoil in a transverse gravity field, **29**, 1967, 317

Latham, J. *See* Abbas & Latham

Lau, Y. L. & Baines, W. D. Flow of stratified fluid through curved screens, **33**, 1968, 721

Laumbach, Dallas D. & Probstein, Ronald F. A point explosion in a cold exponential atmosphere, **35**, 1969, 53

A point explosion in a cold exponential atmosphere. Part 2. Radiating flow, **40**, 1970, 833

Launder, B. E. & Jones, W. P. Sink flow turbulent boundary layers, **38**, 1969, 817

Lavan, Z. & Fejer, A. A. Luminescence in supersonic swirling flows, **23**, 1965, 173

Leal, L. G. & Acrivos, A. The effect of base bleed on the steady separated flow past bluff objects, **39**, 1969, 735

See also Acrivos, Leal, Snowden & Pan

LeBlond, Paul H. On the damping of internal gravity waves in a continuously stratified ocean, **25**, 1966, 121

Gas diffusion from ascending gas bubbles, **35**, 1969, 711

Lee, John H. *See* Bach & Lee

Lee, J. S. & Fung, Y. C. Stokes flow around a circular cylindrical post confined between two parallel plates, **37**, 1969, 657

Lee, R. S. Hypersonic non-equilibrium flow over slender bodies, **22**, 1965, 417

Lee, R. S. & Cheng, H. K. On the outer-edge problem of a hypersonic boundary layer, **38**, 1969, 161

Lees, L. *See* Ru-Sue Ko, Kubota & Lees

Le Fur, Bernard & Martin, Madeleine Laminar and transitional flow of drilling muds and various suspensions in circular tubes, **30**, 1967, 449

Leibovich, S. Magnetohydrodynamic flow at a rear stagnation point, **29**, 1967, 401

Axially-symmetric eddies embedded in a rotational stream, **32**, 1968, 529

Leibovich, S. & Ludford, G. S. S. Aligned-field hydromagnetic flow past a slender body, **25**, 1966, 289

See also Hunt & Leibovich; Lessen, Zien & Leibovich

Lenau, Charles W. The solitary wave of maximum amplitude, **26**, 1966, 309

Lenau, Charles W. & Street, Robert L. A non-linear theory for symmetric, super-cavitating flow in a gravity field, **21**, 1965, 257

Leonov, A. I. *See* Buyevich, Leonov & Safrai

Lessen, M., Fox, J. A. & Zien, H. M. The instability of inviscid jets and wakes in compressible fluid, **21**, 1965, 129

Stability of the laminar mixing of two parallel streams with respect to supersonic disturbances, **25**, 1966, 737

On the inviscid stability of the laminar mixing of two parallel streams of a compressible fluid, **23**, 1965, 355

Lessen, M., Harpavat, G. & Zien, H. M. Stability of three-dimensional laminar and turbulent shear layers, **38**, 1969, 39

Lessen, M., Zien, H. M. & Leibovich, S. On the stability of forward and rearward slug flows due to the motion of a body through a perfectly conducting liquid, **24**, 1966, 335

Lesser, M. B. & Seebass, R. The structure of a weak shock wave undergoing reflexion from a wall, **31**, 1968, 501

Liang, S. F., Vidal, A. & Acrivos, Andreas Buoyancy-driven convection in cylindrical geometries, **36**, 1969, 239

Libby, Paul A. *See* Chen & Libby

Lick, Wilbert The instability of a fluid layer with time-dependent heating, **21**, 1965, 565

The shock-expansion method and Whitham's rule, **25**, 1966, 179

Lighthill, M. J. Dynamics of rotating fluids: a survey, **26**, 1966, 411

On waves generated in dispersive systems by travelling forcing effects, with applications to the dynamics of rotating fluids, **27**, 1967, 725

Pressure-forcing of tightly fitting pellets along fluid-filled elastic tubes, **34**, 1968, 113

See also Hide, Ibbetson & Lighthill

Lilleleht, L. U. *See* Charles & Lilleleht

Lilly, D. K. *See* Deardorff, Willis & Lilly

Lin, S. P. Finite-amplitude stability of a parallel flow with a free surface, **36**, 1969, 113

Roles of surface tension and Reynolds stresses on the finite-amplitude stability of a parallel flow with a free surface, **40**, 1970, 307

Lipps, Frank B. The stability of an asymmetric zonal current in the atmosphere, **21**, 1965, 225

List, E. J. A two-dimensional sink in a density-stratified porous medium, **33**, 1968, 529

An exact solution for a diffusive flow in a porous medium, **36**, 1969, 17

Liu, C. Y. *See* Sandborn & Liu
Loizou, G. *See* Sozou & Loizou
Long, R. R. *See* Graebel, Long & Wu; Martin & Long
Longuet-Higgins, M. S. On the trapping of wave energy round islands, **29**, 1967, 781
On the trapping of waves along a discontinuity of depth in a rotating ocean, **31**, 1968, 417
Double Kelvin waves with continuous depth profiles, **34**, 1968, 49
On the reflexion of wave characteristics from rough surfaces, **37**, 1969, 231
On the trapping of long-period waves round islands, **37**, 1969, 773
Longuet-Higgins, M. S. & Smith, N. D. An experiment on third-order resonant wave interactions, **25**, 1966, 417
See also Bretherton, Carrier & Longuet-Higgins
Loper, David E. *See* Benton & Loper
Lord, W. T. An electric arc in a transverse magnetic field: a theory for low power gradient, **35**, 1969, 689
Lortz, D. A stability criterion for steady finite amplitude convection with an external magnetic field, **23**, 1965, 113
See also Küppers & Lortz; Schlüter, Lortz & Busse
Lubin, Barry T. & Springer, George S. The formation of a dip on the surface of a liquid draining from a tank, **29**, 1967, 385
Ludford, G. S. S. *See* Hunt & Ludford; Leibovich & Ludford
Luke, J. C. A variational principle for a fluid with a free surface, **27**, 1967, 395
Lyall, E. *See* Partridge & Lyall
Lynden-Bell, D. *See* Gough & Lynden-Bell

McConaghy, G. A. & Finlayson, B. A. Surface tension driven oscillatory instability in a rotating fluid layer, **39**, 1969, 49
McDonald, H. A study of the turbulent separated flow region occurring at a compression corner in supersonic flow, **22**, 1965, 481
The effect of pressure gradient on the law of the wall in turbulent flow, **35**, 1969, 311
McEwan, A. D. Inertial oscillations in a rotating fluid cylinder, **40**, 1970, 603
McEwan, A. D. & Taylor, G. I. The peeling of a flexible strip attached by a viscous adhesive, **26**, 1966, 1
See also Taylor & McEwan
McGoldrick, L. F. Resonant interactions among capillary–gravity waves, **21**, 1965, 305
An experiment on second-order capillary gravity resonant wave interactions, **40**, 1970, 251
McGoldrick, L. F., Phillips, O. M., Huang, N. E. & Hodgson, T. H. Measurements of third-order resonant wave interactions, **25**, 1966, 437
McIntyre, Michael E. The axisymmetric convective regime for a rigidly-bounded rotating annulus, **32**, 1968, 625
On the non-separable baroclinic parallel flow instability problem, **40**, 1970, 273

Mackinnon, R. F., Mulley, R. & Warren, F. W. G. Some calculations of gravity wave resistance in an inviscid stratified fluid, **38**, 1969, 61
See also Warren & Mackinnon
McLeod, J. B. & Serrin, J. The behaviour of similar solutions in a compressible boundary layer, **34**, 1968, 337
McNamara, B. *See* Klozenberg, McNamara & Thonemann
McNaughton, K. J. & Sinclair, C. G. Submerged jets in short cylindrical flow vessels, **25**, 1966, 367
Macpherson, A. K. The three-dimensional detonation polar and an application to spinning detonation, **35**, 1969, 451
Shock compression at a molecular level, **39**, 1969, 849
See also Henderson & Macpherson
Macagno, Enzo O. & Hung, Tin-Kan Computational and experimental study of a captive annular eddy, **28**, 1967, 43
Madsen, O. S. & Mei, C. C. The transformation of a solitary wave over an uneven bottom, **39**, 1969, 781
Maidanik, G. *See* Ffowcs Williams & Maidanik
Maki, E. Roland, Kuzma, Dennis C. & Donnelly, Russell J. Magnetohydrodynamic lubrication flow between parallel plates, **26**, 1966, 537
The magnetohydrodynamic thrust bearing, **30**, 1967, 83
Malcolm, D. G. Some aspects of turbulence measurement in liquid mercury using cylindrical quartz-insulated hot-film sensors, **37**, 1969, 701
See also Hunt & Malcolm
Malkus, Willem V. R. Hydromagnetic planetary waves, **28**, 1967, 793
Mangler, K. W. & Weber, J. The flow field near the centre of a rolled-up vortex sheet, **30**, 1967, 177
See also Catherall & Mangler
Mark, Richard M. On the theory of asymmetric shear flows past flat plates, **25**, 1966, 457
Martin, B. W. *See* Mukerjee & Martin
Martin, E. Dale Boundary shock waves, **28**, 1967, 337
Martin, Madeleine *See* Le Fur & Martin
Martin, Seelye & Long, Robert R. The slow motion of a flat plate in a viscous stratified fluid, **31**, 1968, 669
Mason, B. J. *See* Jayaweera & Mason
Massaro, T. A. *See* Becker & Massaro
Matthews, D. H. *See* Hoyle & Matthews
Maude, A. D. & Yearn, J. A. Particle migrations in suspension flows, **30**, 1967, 601
Maxworthy, T. Accurate measurements of sphere drag at low Reynolds numbers, **23**, 1965, 369
An experimental determination of the slow motion of a sphere in a rotating, viscous fluid, **23**, 1965, 373
A note on the existence of wakes behind large, rising bubbles, **27**, 1967, 367
The observed motion of a sphere through a short, rotating cylinder of fluid, **31**, 1968, 643

Experimental studies in magneto-fluid dynamics: pressure distribution measurements around a sphere, **31**, 1968, 801

Experimental studies in magneto-fluid dynamics: flow over a sphere with a cylindrical afterbody, **35**, 1969, 411

The flow created by a sphere moving along the axis of a rotating, slightly-viscous fluid, **40**, 1970, 453

Measures, R. M. *See* Belozerov & Measures

Meecham, William C. & Jeng, Dah-Teng Use of the Wiener–Hermite expansion for nearly normal turbulence, **32**, 1968, 225

Mei, Chiang C. & Black, Jared L. Scattering of surface waves by rectangular obstacles in waters of finite depth, **38**, 1969, 499

See also Madsen & Mei

Melcher, J. R. Review of the I.U.T.A.M.–I.U.P.A.P. Symposium on Electrohydrodynamics, **40**, 1970, 641

See also Calvert & Melcher; Zelazo & Melcher

Mellor, G. L. The effects of pressure gradients on turbulent flow near a smooth wall, **24**, 1966, 255

Mellor, G. L., Chapple, P. J. & Stokes, V. K. On the flow between a rotating and a stationary disk, **31**, 1968, 95

Mellor, G. L. & Gibson, D. M. Equilibrium turbulent boundary layers, **24**, 1966, 225

Merkin, J. H. Oscillatory free convection from an infinite horizontal cylinder, **39**, 1967, 561

The effect of buoyancy forces on the boundary-layer flow over a semi-infinite vertical flat plate in a uniform free stream, **35**, 1969, 439

Merrill, E. W. *See* Virk, Merrill, Mickley, Smith & Mollo-Christensen

Meyer, R. E. Note on the undular jump, **28**, 1967, 209

Michael, D. H. The steady motion of a sphere in a dusty gas, **31**, 1968, 175

Michael, D. H. & Norey, P. W. Particle collision efficiencies for a sphere, **37**, 1969, 565

Michalke, A. Vortex formation in a free boundary layer according to stability theory, **22**, 1965, 371

On spatially growing disturbances in an inviscid shear layer, **23**, 1965, 521

A note on spatially growing three-dimensional disturbances in a free shear layer, **38**, 1969, 765

Michalke, A. & Timme, A. On the inviscid instability of certain two-dimensional vortex-type flows, **29**, 1967, 647

Michelson, D. Electrocapillary discharge of a liquid, **33**, 1968, 573

Mickley, H. S. *See* Virk, Merrill, Mickley, Smith & Mollo-Christensen

Miles, John W. A note on shock–shock diffraction, **22**, 1965, 95

A note on the interaction between surface waves and wind profiles, **22**, 1965, 823

The collapse time of a closed cavity, **25**, 1966, 743

Internal waves in a continuously stratified atmosphere or ocean, **28**, 1967, 305

Surface wave scattering matrix for a shelf, **28**, 1967, 755

On the generation of surface waves by shear flows. Part 5, **30**, 1967, 163
Lee waves in a stratified flow. Part 1. Thin barrier, **32**, 1968, 549
Lee waves in a stratified flow. Part 2. Semi-circular obstacle, **33**, 1968, 803
The Cauchy–Poisson problem for a viscous liquid, **34**, 1968, 359
The lee-wave régime for a slender body in a rotating flow, **36**, 1969, 265
Transient motion in a rotating flow, **39**, 1969, 433

Miles, John W. & Gilbert, Freeman Scattering of gravity waves by a circular dock, **34**, 1968, 783

Miles, John W. & Huppert, H. E. Lee waves in a stratified flow. Part 4. Perturbation approximations, **35**, 1969, 497

See also Huppert & Miles

Milgram, Jerome H. The motion of a fluid in a cylindrical container with free surface following vertical impact, **37**, 1969, 435

Mill, C. C. & South, G. R. Formation of ribs on rotating rollers, **28**, 1967, 523

Miller, Chester *See* Goddard & Miller

Miller, C. A. & Scriven, L. E. The oscillations of a fluid droplet immersed in another fluid, **32**, 1968, 417

Mills, R. D. Numerical and experimental investigations of the shear layer between two parallel streams, **33**, 1968, 591

Mirels, Harold *See* Ellinwood & Mirels

Mitchell, James E. & Hanratty, Thomas J. A study of turbulence at a wall using an electrochemical wall shear–stress meter, **26**, 1966, 199

Mobbs, F. R. Spreading and contraction at the boundaries of free turbulent flows, **33**, 1968, 227

Moffatt, H. K. On fluid flow induced by a rotating magnetic field, **22**, 1965, 521

On the suppression of turbulence by a uniform magnetic field, **28**, 1967, 571
The degree of knottedness of tangled vortex lines, **35**, 1969, 117

Moffatt, H. K. & Toomre, J. The annihilation of a two-dimensional jet by a transverse magnetic field, **30**, 1967, 65

See also Kline, Moffatt & Morkovin

Moilliet, A. *See* Grant, Hughes, Vogel & Moilliet; Grant, Moilliet & Vogel

Mollendorf, J. *See* Gebhart & Mollendorf

Mollo-Christensen, E. L. *See* Gupta, Landahl & Mollo-Christensen; Tatro & Mollo-Christensen; Virk, Merrill, Mickley, Smith & Mollo-Christensen

Molyneux, John E. *See* Keller, Rubenfeld & Molyneux

Moore, D. W. The velocity of rise of distorted gas bubbles in a liquid of small viscosity, **23**, 1965, 749

Moore, D. W. & Saffman, P. G. The rise of a body through a rotating fluid in a container of finite length, **31**, 1968, 635

The flow induced by the transverse motion of a thin disk in its own plane through a contained rapidly rotating viscous liquid, **39**, 1969, 831

See also Drazin & Moore; Harper & Moore; Harper, Moore & Pearson; Munk & Moore

Moore, R. E. & Perko, L. M. Inviscid fluid flow in an accelerating cylindrical container, **22**, 1965, 305

Moran, John P. & Shen, S. F. On the formation of weak plane shock waves by impulsive motion of a piston, **25**, 1966, 705

Moran, John P. & Van Moorhem, William K. Diffraction of a plane shock by an analytic blunt body, **38**, 1969, 127

Morkovin, M. V. *See* Kline, Moffatt & Morkovin

Morris, W. D. Laminar convection in a heated vertical tube rotating about a parallel axis, **21**, 1965, 453

Morrison, W. R. B. & Kronauer, R. E. Structural similarity for fully developed turbulence in smooth tubes, **39**, 1969, 117

Morton, B. R. The strength of vortex and swirling core flows, **38**, 1969, 315

Motz, Robin O. Magnetohydrodynamic drag on an oscillating sphere, **24**, 1966, 705

Mow, Van C. *See* Keller & Mow

Mowbray, D. E. The use of schlieren and shadowgraph techniques in the study of flow patterns in density stratified liquids, **27**, 1967, 595

Mowbray, D. E. & Rarity, B. S. H. A theoretical and experimental investigation of internal waves of small amplitude in a density stratified liquid, **28**, 1967, 1

The internal wave pattern produced by a sphere moving vertically in a density stratified liquid, **30**, 1967, 489

Mukerjee, T. & Martin, B. W. Turbulent shear layer reattachment downstream of a backward-facing step in confined supersonic axisymmetric flow, **39**, 1969, 307

Mulley, R. *See* Mackinnon, Mulley & Warren

Munk, Walter & Moore, D. W. Is the Cromwell current driven by equatorial Rossby waves? **33**, 1968, 241

Murray, J. D. Incompressible viscous flow past a semi-infinite flat plate, **21**, 1965, 337

On the mathematics of fluidization. Part I. Fundamental equations and wave propagation, **21**, 1965, 465

On the mathematics of fluidization. Part 2. Steady motion of fully developed bubbles, **22**, 1965, 57

Incompressible slip-flow past a semi-infinite flat plate, **22**, 1965, 463

Initial motion of a bubble in a fluidized bed. Part 1. Theory, **28**, 1967, 417

Murty, G. S. & Rao, K. Sankara Numerical study of the behaviour of a system of parallel line vortices, **40**, 1970, 595

Musman, Steven Penetrative convection, **31**, 1968, 343

Mysak, L. A. On the generation of double Kelvin waves, **37**, 1969, 417

Nagamutsu, H. T., Graber, B. C. & Sheer, R. E. Roughness, bluntness, and angle-of-attack effects on hypersonic boundary-layer transition, **24**, 1966, 1

Namba, Masanobu Lifting-surface theory for cascade of blades in subsonic shear flow, **36**, 1969, 735

Theory of transonic shear flow past a thin aerofoil, **36**, 1969, 759

Narasimha, R. Asymptotic solutions for the distribution function in non-equilibrium flows. Part 1. The weak shock, **34**, 1968, 1

Narasimha, R. & Deshpande, S. M. Minimum error solutions of the Boltzmann equation for shock structure, **36**, 1969, 555

Narasimha, R. & Ojha, S. K. Effect of longitudinal surface curvature on boundary layers, **29**, 1967, 187

See also Deshpande & Narasimha

Nash, J. F. The calculation of three-dimensional turbulent boundary layers in incompressible flow, **37**, 1969, 625

Naudascher, E. Flow in the wake of self-propelled bodies and related sources of turbulence, **22**, 1965, 625

Nayfeh, Ali Hasan On the non-linear Lamb–Taylor instability, **38**, 1969, 619

Finite amplitude surface waves in a liquid layer, **40**, 1970, 671

Neiburger, M. *See* Steinberger, Pruppacher & Neiburger

Neilson, John H. & Gilchrist, Alastair A analytical and experimental investigation of the velocities of particles entrained by the gas flow in nozzles, **33**, 1968, 131

An analytical and experimental investigation of the trajectories of particles entrained by the gas flow in nozzles, **35**, 1969, 549

Newell, A. C. Rossby wave packet interactions, **35**, 1969, 255

Newell, A. C., Lange, C. G. & Aucoin, P. J. Randon convection, **40**, 1970, 513

Newell, A. C. & Whitehead, J. A. Finite bandwidth, finite amplitude convection, **38**, 1969, 279

Newman, J. N. Propagation of water waves past long two-dimensional obstacles, **23**, 1965, 23

Propagation of water waves over an infinite step, **23**, 1965, 399

Lateral motion of a slender body between two parallel walls, **39**, 1969, 97

Nicholl, C. I. H. Some dynamical effects of heat on a turbulent boundary layer, **40**, 1970, 361

Nicholls, J. Arthur *See* Cheslak, Nicholls & Sichel

Nickerson, E. C. Upper bounds on the torque in cylindrical Couette flow, **38**, 1969, 807

Nicoll, W. B. *See* Escudier & Nicoll

Nield, D. A. The thermohaline Rayleigh–Jeffreys problem, **29**, 1967, 545

The Rayleigh–Jeffreys problem with boundary slab of finite conductivity, **32**, 1968, 393

Nihoul, Jacques C. J. The Malkus theory applied to magnetohydrodynamic turbulent channel flow, **25**, 1966, 1

Niiler, P. P. & Bisshopp, F. E. On the influence of Coriolis force on onset of thermal convection, **22**, 1965, 753

Niiler, P. P. & White, H. J. Note on the swimming deceleration of a dolphin, **38**, 1969, 613

See also Bisshopp & Niiler

Nishida, M. *See* Kamimoto & Nishida

Norbury, J. F. *See* Herring & Norbury; Horlock, Norbury & Cooke

Norey, P. W. *See* Michael & Norey

Nye, James O. & Brodkey, Robert S. The scalar spectrum in the viscous-convective subrange, **29**, 1967, 151

Obremski, H. J. & Fejer, A. A. Transition in oscillating boundary layer flows, **29**, 1967, 93

O'Brien, Edward E. On the flux of heat through laminar wavy liquid layers, **28**, 1967, 295

Ockendon, H. & Spence, D. A. Non-linear wave propagation in a relaxing gas, **39**, 1969, 329

Ockendon, J. R. The separation of Newtonian shock layers, **26**, 1966, 563

The unsteady motion of a small sphere in a viscous liquid, **34**, 1968, 229

Odar, Fuat Verification of the proposed equation for calculation of the forces on a sphere accelerating in a viscous fluid, **25**, 1966, 591

Ohrenberger, J. T. *See* Rott & Ohrenberger

Ojha, S. K. *See* Narasimha & Ojha

Okada, Osami *See* Sato & Okada

Olfe, D. B. & Deplomb, E. P. The decay of perturbations in a radiating gas, **40**, 1970, 127

Olsen, John H. & Shapiro, A. H. Large-amplitude unsteady flow in liquid-filled elastic tubes, **29**, 1967, 513

O'Neill, M. E. & Stewartson, K. On the slow motion of a sphere parallel to a nearby plane wall, **27**, 1967, 705

Orloff, L. *See* Torrance, Orloff & Rockett

Ortloff, C. R. & Ives, J. On the dynamic motion of a thin flexible cylinder in a viscous stream, **38**, 1969, 713

Ostrach, Simon *See* Sherman & Ostrach

Otis, David R. Computation and measurement of Hall potentials and flow-field perturbations in magnetogasdynamic flow of an axisymmetric free jet, **24**, 1966, 41

Owen, P. R. Pneumatic transport, **39**, 1969, 407

Oxburgh, E. R. *See* Turcotte & Oxburgh

Pack, D. C. & Swan, G. W. Magneto-gasdynamic flow over a wedge, **25**, 1966, 165

Packham, B. A. Reflexion of Kelvin waves at the open end of a rotating semi-infinite channel, **39**, 1969, 321

Packham, B. A. & Williams, W. E. Diffraction of Kelvin waves at a sharp bend, **34**, 1968, 517

Paidoussis, M. P. Dynamics of flexible slender cylinders in axial flow. Part 1. Theory, **26**, 1966, 717

Dynamics of flexible slender cylinders in axial flow. Part 2. Experiment, **26**, 1966, 737

Stability of towed, totally submerged flexible cylinders, **34**, 1968, 273

Palm, E., Ellingsen, T. & Gjevik, B. On the occurence of cellular motion in Benard convection, **30**, 1967, 651

See also Ellingsen, Gjevik & Palm

Pan, F. & Acrivos, Andreas Steady flows in rectangular cavities, **28**, 1967, 643
See also Acrivos, Leal, Snowden & Pan
Panton, Ronald Flow properties for the continuum viewpoint of a non-equilibrium gas-particle mixture, **31**, 1968, 273
The transient for Stokes' oscillating plate: a solution in terms of tabulated functions, **31**, 1968, 819
Pao, Sui-Kwong & Siekmann, J. Oscillations of a vapour cavity in a rotating cylindrical tank, **31**, 1968, 249
Pao, Yih-Ho Laminar flow of a stably stratified fluid past a flat plate, **34**, 1968, 795
Parker, D. F. Non-linearity, relaxation and diffusion in acoustics and ultrasonics, **39**, 1969, 793
Parkes, T. *See* Burns & Parkes
Parkinson, G. V. & Jandali, T. A wake source model for bluff body potential flow, **40**, 1970, 577
Parlange, Jean-Yves A theory of water-bells, **29**, 1967, 361
Spherical cap bubbles with laminar wakes, **37**, 1969, 257
Parry, D. J. *See* Edwards, Parry & Jones
Parsons, A. T. A two-layer model of Gulf Stream separation, **39**, 1969, 511
Partridge, B. A. & Lyall, E. Initial motion of a bubble in a fluidized bed. Part 2. Experiment, **28**, 1967, 429
See also Rowe & Partridge
Patel, V. C. Calibration of the Preston tube and limitations on its use in pressure gradients, **23**, 1965, 185
Patel, V. C. & Head, M. R. Reversion of turbulent to laminar flow, **34**, 1968, 371
Some observations on skin friction and velocity profiles in fully developed pipe and channel flows, **38**, 1969, 181
Pearson, Carl E. A computational method for viscous flow problems, **21**, 1965, 611
Numerical solutions for the time dependent viscous flow between two rotating coaxial disks, **21**, 1965, 623
A numerical study of the time-dependent viscous flow between two rotating spheres, **28**, 1967, 323
Pearson, J. R. A. & Petrie, C. J. S. The flow of a tubular film. Part 1. Formal mathematical representation, **40**, 1970, 1
See also Davidson, Pearson & Vanoni; Harper, Moore & Pearson; Jeffrey & Pearson
Pedley, T. J. The stability of rotating flows with a cylindrical free surface, **30**, 1967, 127
On the instability of rapidly rotating shear flows to non-axisymmetric disturbances, **31**, 1968, 603
The toroidal bubble, **32**, 1968, 97
On the instability of viscous flow in a rapidly rotating pipe, **35**, 1969, 97
The viscous vortex induced by a sink on the axis of a circulating fluid in the presence of a plane free surface, **36**, 1969, 219

Pedlosky, J. The spin up of a stratified fluid, **28**, 1967, 463
An overlooked aspect of the wind-driven oceanic circulation, **32**, 1968, 809
Linear theory of the circulation of a stratified ocean, **35**, 1969, 185
Axially symmetric motion of a stratified, rotating fluid in a spherical annulus of narrow gap, **36**, 1969, 401
Pedlosky, J. & Greenspan, H. P. A simple laboratory model for the oceanic circulation, **27**, 1967, 291
See also Barcilon & Pedlosky
Pekeris, Chaim L. & Shkoller, Boris Stability of plane Poiseuille flow to periodic disturbances of finite amplitude in the vicinity of the neutral curve, **29**, 1967, 31
Stability of plane Poiseuille flow to periodic disturbances of finite amplitude, **39**, 1969, 611
The neutral curves for periodic perturbations of finite amplitude of plane Poiseuille flow, **39**, 1969, 629
Peregrine, D. H. Calculations of the development of an undular bore, **25**, 1966, 321
Long waves on a beach, **27**, 1967, 815
Long waves in a uniform channel of arbitrary cross-section, **32**, 1968, 353
Solitary waves in trapezoidal channels, **35**, 1969, 1
Perko, L. M. Large-amplitude motions of a liquid–vapour interface in an accelerating container, **35**, 1969, 77
See also Moore & Perko
Perry, A. E. Turbulent boundary layers in decreasing adverse pressure gradients, **26**, 1966, 481
Perry, A. E., Bell, J. B. & Joubert, P. N. Velocity and temperature profiles in adverse pressure gradient turbulent boundary layers, **25**, 1966, 299
Perry, A. E. & Joubert, P. N. A three-dimensional turbulent boundary layer, **22**, 1965, 285
Perry, A. E., Schofield, W. H. & Joubert, P. N. Rough wall turbulent boundary layers, **37**, 1969, 383
Peterka, Jon A. & Richardson, P. D. Effects of sound on separated flows, **37**, 1969, 265
Petersen, E. E. *See* Acrivos, Snowden, Grove & Petersen
Petrie, C. J. S. *See* Pearson & Petrie
Petty, D. G. *See* Blythe, Petty, Schofield & Wilson
Pfeffer, Robert *See* Goldin, Yerushalmi, Pfeffer & Shinnar
Phillips, O. M. The maintenance of Reynolds stress in turbulent shear flow, **27**, 1967, 131
The interaction trapping of internal gravity waves, **34**, 1968, 407
See also Kato & Phillips; McGoldrick, Phillips, Huang & Hodgson
Pinsent, H. G. On the entry problem for a compressible liquid, **25**, 1966, 577
Plate, E. J., Chang, P. C. & Hidy, G. M. Experiments on the generation of small water waves by wind, **35**, 1969, 625
See also Hidy & Plate

Platzman, George W. The spectral dynamics of laminar convection, **23**, 1965, 481

Polymeropoulos, Constantine E. & Gebhart, B. Incipient instability in free convection laminar boundary layers, **30**, 1967, 225

Poots, G. Compressible laminar boundary-layer flow at a point of attachment, **22**, 1965, 197

Potter, Merle C. Stability of plane Couette-Poiseuille flow, **24**, 1966, 609

See also Reynolds & Potter

Prasad, Phoolan *See* Bhatnagar, Sachdev & Prasad

Pritchard, W. G. The motion generated by a body moving along the axis of a uniformly rotating fluid, **39**, 1969, 443

Probstein, Ronald F. *See* Laumbach & Probstein

Pruppacher, H. R. *See* Steinberger, Pruppacher & Neiburger

Puri, Pratap *See* Soundalgekar & Puri

Quarmby, Alan & Anand, R. K. Axisymmetric turbulent mass transfer in a circular tube, **38**, 1969, 433

Non-axisymmetric turbulent mass transfer in a circular tube, **38**, 1969, 457

Quinn, J. A. *See* Blair & Quinn

Rai, Lajpat *See* Gupta & Rai

Ram, Rishi On normal vorticity and current density generated behind a magnetogasdynamic shock wave in unsteady flows, **30**, 1967, 805

Ramanaiah, G. Magnetogasdynamic thrust bearing with an axial pinch, **38**, 1969, 673

Ramjee, V. *See* Badri Narayanan & Ramjee

Rao, Desiraju B. Free gravitational oscillations in rotating rectangular basins, **25**, 1966, 523

Rao, K. Sankara *See* Murty & Rao

Rarity, B. S. H. On the viscous flow in the nose region of a symmetric blunt body in hypersonic flow, **26**, 1966, 829

On the breakdown of characteristics solutions in flows with vibrational relaxation, **27**, 1967, 49

The two-dimensional wave pattern produced by a disturbance moving in an arbitrary density stratified liquid, **30**, 1967, 329

A theory of the propagation of internal gravity waves of finite amplitude, **39**, 1969, 497

See also Mowbray & Rarity

Raudkivi, A. J. Bed forms in alluvial channels, **26**, 1966, 507

Redberger, P. J. *See* Kruyer, Redberger & Ellis

Rees, T. & Bhangu, J. K. The effects of small quantities of hydrogen, deuterium and helium on vibrational relaxation of carbon dioxide, **39**, 1969, 601

Reid, W. H. *See* Gage & Reid; Hughes & Reid

Reynolds, A. J. Waves on the erodible bed of an open channel, **22**, 1965, 113
Wall layers with non-uniform shear stress, **22**, 1965, 443
The swimming of minute organisms, **23**, 1965, 241
See also Tucker & Reynolds
Reynolds, W. C. & Potter, Merle C. Finite-amplitude instability of parallel shear flows, **27**, 1967, 465
Reynolds, W. C. & Tiederman, W. G. Stability of turbulent channel flow, with application to Malkus's theory, **27**, 1967, 253
See also Kline, Reynolds, Schraub & Runstadler; Uzkan & Reynolds
Rhines, P. B. Slow oscillations in an ocean of varying depth. Part 1. Abrupt topography, **37**, 1969, 161
Slow oscillations in an ocean of varying depth. Part 2. Islands and seamounts, **37**, 1969, 191
Ribner, H. S. Acoustic energy flux from shock-turbulence interaction, **35**, 1969, 299
Quadrupole correlations governing the pattern of jet noise, **38**, 1969, 1
Richards, J. M. Puff motions in unstratified surroundings, **21**, 1965, 97
Inclined buoyant puffs, **32**, 1968, 681
Richardson, P. D. Heat transfer from a circular cylinder by acoustic streaming, **30**, 1967, 337
See also Hanson, Kozak & Richardson; Peterka & Richardson
Richardson, S. Two-dimensional bubbles in slow viscous flow, **33**, 1968, 475
Rickard, J. A. *See* Stewartson & Rickard
Riley, J. *See* Bradbury & Riley
Riley, N. Thermally induced boundary-layer flows in a rotating environment, **29**, 1967, 241
Riley, N. & Stewartson, K. Trailing edge flows, **39**, 1969, 193
Rimmer, P. L. Heat transfer from a sphere in a stream of small Reynolds number, **32**, 1968, 1
Ritchie, G. S. On the stability of viscous flow between eccentric rotating cylinders, **32**, 1968, 131
Roberts, P. H. Convection in horizontal layers with internal heat generation. Theory, **30**, 1967, 33
Robertson, C. R. & Acrivos, A. Low Reynolds number shear flow past a rotating circular cylinder. Part 1. Momentum transfer, **40**, 1970, 685
Low Reynolds number shear flow past a rotating circular cylinder. Part 2. Heat transfer, **40**, 1970, 705
Robertson, J. M. *See* Hopkins & Robertson
Robinson, A. R. A three-dimensional model of inertial currents in a variable-density ocean, **21**, 1965, 211
See also Spiegel & Robinson
Robinson, J. L. A note on the stability of an infinite fluid heated from below, **29**, 1967, 461
Finite amplitude convection cells, **30**, 1967, 577
Rockett, J. A. *See* Torrance, Orloff & Rockett; Torrance & Rockett
Rodgers, J. B. *See* Clarke & Rodgers

Roos, F. W. *See* Willmarth, Hawk, Galloway & Roos; Willmarth & Roos

Roscoe, R. On the rheology of a suspension of viscoelastic spheres in a viscous liquid, **28**, 1967, 273

Rose, W. G. Results of an attempt to generate a homogeneous turbulent shear flow, **25**, 1966, 97

Rosenblat, S. Centrifugal instability of time-dependent flows. Part 1. Inviscid, periodic flows, **33**, 1968, 321

See Ffowcs Williams, Rosenblat & Stuart; Jones & Rosenblat

Rosenweig, R. E. *See* Cowley & Rosenweig

Rosler, Richard S. & Stewart, George H. Impingement of gas jets on liquid surfaces, **31**, 1968, 163

Rossby, H. T. A study of Bénard convection with and without rotation, **36**, 1969, 309

Rotem, Zeev & Claassen, Lutz Natural convection above unconfined horizontal surfaces, **39**, 1969, 173

Rott, N. & Ohrenberger, J. T. Transformations of the boundary-layer equations for rotating frames, **33**, 1968, 113

Rouse, Hunter *See* Sami, Carmody & Rouse

Rowe, Althea *See* Cade & Rowe

Rowe, P. N. & Partridge, B. A. Note on Murray's paper on bubbles in fluidized beds, **23**, 1965, 583

Rubenfeld, Lester A. *See* Keller, Rubenfeld & Molyneux

Rubin, Stanley G. Incompressible flow along a corner, **26**, 1966, 97

Runstadler, P. W. *See* Kline, Reynolds, Schraub & Runstadler

Russell, David A. Shock-wave strengthening by area convergence, **27**, 1967, 305

Ru-Sue Ko, D., Kubota, T. & Lees, L. Finite disturbance effect on the stability of a laminar incompressible wake behind a flat plate, **40**, 1970, 315

Sachdev, P. L. *See* Bhatnagar, Sachdev & Prasad

Saffman, P. G. The lift on a small sphere in a slow shear flow, **22**, 1965, 385

The large-scale structure of homogeneous turbulence, **27**, 1967, 581

The self-propulsion of a deformable body in a perfect fluid, **28**, 1967, 385

See also Moore & Saffman

Safrai, V. M. *See* Buyevich, Leonov & Safrai

Sajben, Miklos & Fay, James A. Measurement of the growth of a turbulent mercury jet in a coaxial magnetic field, **27**, 1967, 81

Sakurai, Takeo Spin down problem of rotating stratified fluid in thermally insulated circular cylinders, **37**, 1969, 689

Salathe, Eric P. The fundamental matrix in three-dimensional dissipative gasdynamics, **39**, 1969, 209

Salathe, Eric P. & Sirovich, Lawrence Dissipative magnetogasdynamic flow, **33**, 1968, 361

Salveson, Nils On higher-order wave theory for submerged two-dimensional bodies, **38**, 1969, 415

Salwen, Harold *See* Grosch & Salwen

Sami, Sedat Balance of turbulence energy in the region of jet-flow establishment, **29**, 1967, 81

Sami, Sedat, Carmody, Thomas & Rouse, Hunter Jet diffusion in the region of flow establishment, **27**, 1967, 231

Sampson, Robert E. & Springer, George S. Condensation on and evaporation from droplets by a moment method, **36**, 1969, 577

Sandborn, V. A. & Liu, C. Y. On turbulent boundary layer separation, **32**, 1968, 293

See also Chao & Sandborn

Sani, R. L. *See* Gresho & Sani

Sarma, L. V. *See* Krishna & Sarma

Sartory, Walter K. *See* Chang & Sartory

Sato, Hiroshi & Okada, Osami The stability and transition of an axisymmetric wake, **26**, 1966, 237

Sauerwein, Harry The method of characteristics for the three-dimensional unsteady magnetofluid dynamics of a multi-component medium, **25**, 1966, 17

Saville, D. A. & Churchill, S. W. Laminar free convection in boundary layers near horizontal cylinders and vertical axisymmetric bodies, **29**, 1967, 391

Scanlon, J. W. & Segel, L. A. Finite amplitude cellular convection induced by surface tension, **30**, 1967, 149

Schaffer, Michael J. Hydromagnetic surface waves with alternating magnetic fields, **33**, 1968, 337

Schlüter, A., Lortz, D. & Busse, F. H. On the stability of steady finite amplitude convection, **23**, 1965, 129

Schmidt, B. Electron beam density measurements in shock waves in argon, **39**, 1969, 361

Schmitt-Von Schubert, Barbara Existence and uniqueness of normal shock waves in gas-particle mixtures, **38**, 1969, 633

Schneider, W. A uniformly valid solution for the hypersonic flow past blunted bodies, **31**, 1968, 397

Schofield, D. & Davey, A. Dual solutions of the boundary-layer equations at a point of attachment, **30**, 1967, 809

See also Davey & Schofield; Blythe, Petty, Schofield & Wilson

Schofield, W. H. *See* Perry, Schofield & Joubert

Schraub, F. A. *See* Kline, Reynolds, Schraub & Runstadler

Schubert, G. Viscous flow near a cusped corner, **27**, 1967, 647

Schubert, G. & Corcos, G. M. The dynamics of turbulence near a wall according to a linear model, **29**, 1967, 113

Schultz, D. L. *See* Bellhouse & Schultz

Scrivastava, A. C. Unsteady flow of a second-order fluid near a stagnation point, **24**, 1966, 33

Scriven, L. E. *See* Miller & Scriven

Sears, W. R. The boundary layer in crossed-fields m.h.d., **25**, 1966, 229

Sedney, Raymond & Gerber, Nathan Shock curvature and gradients at the tip of pointed axisymmetric bodies in non-equilibrium flow, **29**, 1967, 765

Seebass, R. & Tamada, K. The distortion of a magnetic field by the flow of a conducting fluid past a circular cylinder, **22**, 1965, 561

See also Lesser & Seebass

Segel, Lee A. The structure of non-linear cellular solutions to the Boussinesq equations, **21**, 1965, 345

The non-linear interaction of a finite number of disturbances to a layer of fluid heated from below, **21**, 1965, 359

Distant sidewalls cause slow amplitude modulation of cellular convection, **38**, 1969, 203

See also Scanlon & Segel

Serrin, J. *See* McLeod & Serrin

Seyer, F. A. Friction reduction in turbulent flow of polymer solution, **40**, 1970, 807

Shankar, P. N. A kinetic theory of steady condensation, **40**, 1970, 385

Shapiro, A. H., Jaffrin, M. Y. & Weinberg, S. L. Peristaltic pumping with long wavelengths at low Reynolds number, **37**, 1969, 799

See also Olsen & Shapiro

Shearer, C. J. & Davidson, J. F. The investigation of a standing wave due to gas blowing upwards over a liquid film; its relation to flooding in wetted-wall columns, **22**, 1965, 321

Sheer, A. F. On the nature of conjugate vortex flows, **33**, 1968, 625

Sheer, R. E. *See* Nagamutsu, Graber & Sheer

Shemdin, Omar H. & Hsu, En Yun Direct measurement of aerodynamic pressure above a simple progressive gravity wave, **30**, 1967, 403

Shen, M. C. On long waves with cross-wind in an atmosphere, **28**, 1967, 481

Shen, S. F. & Crimi, P. The theory for an oscillating thin airfoil as derived from the Oseen equations, **23**, 1965, 585

See also Moran & Shen

Shercliff, J. A. Anisotropic surface waves under a vertical magnetic force, **38**, 1969, 353

Fluid motions due to an electric current source, **40**, 1970, 241

See also Heiser & Shercliff

Sherman, Arthur Magnetohydrodynamic flows of non-equilibrium plasmas, **25**, 1966, 621

Sherman, Michael & Ostrach, Simon On the principle of exchange of stabilities for the magnetohydrodynamic thermal stability problem in completely confined fluids, **24**, 1966, 661

Shi, Yun-Yuan Low Reynolds numbers flow past an ellipsoid of revolution of large aspect ratio, **23**, 1965, 657

Shinnar, Reuel *See* Goldin, Yerushalmi, Pfeffer & Shinnar

Shir, C. C. *See* Joseph & Shir

Shirtcliffe, T. G. L. An experimental investigation of thermosolutal convection at marginal stability, **35**, 1969, 677

Shkoller, Boris *See* Pekeris & Shkoller

Sichel, M. The effect of longitudinal viscosity on the flow at a nozzle throat, **25**, 1966, 769

Sichel, M. & Yin, Y. K. An axisymmetric similarity solution for viscous-transonic nozzle flow, **28**, 1967, 513

See also Cheslak, Nicholls & Sichel

Siekmann, J. *See* Pao & Siekmann

Simpkins, P. G. Some experiments in partially dissociated boundary layers, **26**, 1966, 111

Sinclair, C. G. *See* McNaughton & Sinclair

Sirovich, Lawrence *See* Goldman & Sirovich; Salathe & Sirovich

Skalak, Richard *See* Wang & Skalak

Skews, B. W. The shape of a diffracting shock wave, **29**, 1967, 297

The perturbed region behind a diffracting shock wave, **29**, 1967, 705

Slawson, P. R. & Csanady, G. T. On the mean path of buoyant, bent-over chimney plumes, **28**, 1967, 311

Sleicher, C. A. *See* Champagne & Sleicher; Champagne, Sleicher & Wehrmann

Smith, A. M. O. *See* Giesing & Smith

Smith, C. Edward The starting process in a hypersonic nozzle, **24**, 1966, 625

Smith, F. I. P. *See* Craik & Smith

Smith, K. A. On convective instability induced by surface-tension gradients, **24**, 1966, 401

See also Virk, Merrill, Mickley, Smith & Mollo-Christensen

Smith, N. *See* Dennis & Smith

Smith, N. D. *See* Longuet-Higgins & Smith

Smith, T. N. The spatial distribution of spheres falling in a viscous liquid, **32**, 1968, 203

Snowden, D. D. *See* Acrivos, Snowden, Grove & Petersen; Acrivos, Leal, Snowden & Pan

Snyder, H. A. Wave-number selection at finite amplitude in rotating Couette flow, **35**, 1969, 273

Change in wave-form and mean flow associated with wavelength variations in rotating Couette flow. Part 1, **35**, 1969, 337

Snyder, H. A. & Lambert, R. B. Harmonic generation in Taylor vortices between rotating cylinders, **26**, 1966, 545

Sogin, H. H. *See* Thompson & Sogin

Solomon, Louis A hydraulic analogue study of the Hartmann oscillator phenomenon, **28**, 1967, 261

Somon, J. P. The dynamical instabilities of cylindrical shells, **38**, 1969, 769

Son, Jaime S. & Hanratty, Thomas J. Velocity gradients at the wall for flow around a cylinder at Reynolds numbers from 5×10^3 to 10^5, **35**, 1969, 353

Numerical solution for the flow around a cylinder at Reynolds numbers of 40, 200 and 500, **35**, 1969, 369

Sonju, O. K. *See* Kreith & Sonju

Soulsby, R. *See* Thorpe, Hutt & Soulsby

Soundalgekar, V. M. & Puri, Pratap On fluctuating flow of an elastico-viscous fluid past an infinite plate with variable suction, **35**, 1969, 561

South, G. R. *See* Mill & South

Soward, A. M. Steady free convection above a point heat source and a horizontal line heat source in a vertical magnetic field, **39**, 1969, 753

Sowerby, L. The three-dimensional laminar boundary layer on a flat plate, **22**, 1965, 587

Sozou, C. The field boundary of two line currents in a plasma at uniform pressure, **24**, 1966, 689

Adiabatic transverse modes in a uniformly rotating fluid, **36**, 1969, 605

Sozou, C. & Loizou, G. The field boundary of two line currents immersed in a streaming plasma, **25**, 1966, 761

Sozou, C. & Swithenbank, J. Adiabatic transverse waves in a rotating fluid, **38**, 1969, 657

Spalding, D. B. Heat transfer from turbulent separated flows, **27**, 1967, 97

Sparrow, E. M. & Husar, R. B. Longitudinal vortices in natural convection flow on inclined plates, **37**, 1969, 251

See also Chen & Sparrow; Jonsson & Sparrow; Starr & Sparrow; Tsou, Sparrow & Kurtz

Spence, D. A. & Brown, G. L. Heat transfer to a quadratic shear profile, **33**, 1968, 753

See also Ockendon & Spence

Spiegel, S. L. & Robinson, A. R. On the existence and structure of inertial boundary currents in a stratified ocean, **32**, 1968, 569

Sprankle, Maureen L. *See* Fendell, Sprankle & Dodson

Springer, G. S. *See* Howland, Springer & Hill; Lubin & Springer; Sampson & Springer

Squire, L. C. A law of the wall for compressible turbulent boundary layers with air injection, **37**, 1969, 449

Srivastava, R. S. & Chopra, M. G. Diffraction of blast wave for the oblique case, **40**, 1970, 821

Stalker, R. J. An approximate theory of gun-tunnel behaviour, **22**, 1965, 657

Starr, J. B. & Sparrow, E. M. Experiments on a turbulent cylindrical wall jet, **29**, 1967, 495

Stegen, G. R. *See* Clarke & Stegen

Steinberger, E. H., Pruppacher, H. R. & Neiburger, M. On the hydrodynamics of pairs of spheres falling along their line of centres in a viscous medium, **34**, 1968, 809

Stephenson, C. J. Magnetohydrodynamic flow between rotating coaxial disks, **38**, 1969, 335

Stern, Melvin E. Collective instability of salt fingers, **35**, 1969, 209

Stevenson, T. N. Some two-dimensional internal waves in a stratified fluid, **33**, 1968, 715

Axisymmetric internal waves generated by a travelling oscillating body, **35**, 1969, 219

Stevenson, T. N. & Thomas, N. H. Two-dimensional internal waves generated by a travelling oscillating cylinder, **36**, 1969, 505

Stewart, George H. *See* Rosler & Stewart

Stewart, J. Daniel Mass flow rate for nearly-free molecular slit flow, **35**, 1969, 599

Stewartson, K. On almost rigid rotations. Part 2, **26**, 1966, 131

On slow transverse motion of a sphere through a rotating fluid, **30**, 1967, 359

Stewartson, K. & Rickard, J. A. Pathological oscillations of a rotating fluid, **35**, 1969, 759

See also Brown & Stewartson; Hunt & Stewartson; O'Neill & Stewartson; Riley & Stewartson

Stokes, V. K. *See* Mellor, Chapple & Stokes

Stone, Peter H. *See* Holton & Stone

Street, R. L. *See* Green & Street; Larock & Street; Lenau & Street

Stuart, J. T. Double boundary layers in oscillatory viscous flow, **24**, 1966, 673

On finite amplitude oscillations in laminar mixing layers, **29**, 1967, 417

See also Davey, Di Prima & Stuart; Ffowcs Williams, Rosenblat & Stuart

Sturtevant, B. Application of a magnetic mass spectrometer to ionization studies in impure shock-heated argon, **25**, 1966, 641

Subramanyam, S. V. A note on the damping and oscillations of a fluid drop moving in another fluid, **37**, 1969, 715

Sullivan, Philip A. Inviscid hypersonic flow on cusped concave surfaces, **24**, 1966, 99

Sutera, S. P. Vorticity amplification in stagnation-point flow and its effect on heat transfer, **21**, 1965, 513

Sutherland, Alex J. Growth of spectral components in a wind-generated wave train, **33**, 1968, 545

Suzuki, T. *See* Uchida & Suzuki

Swan, G. W. *See* Pack & Swan

Swithenbank, J. *See* Sozou & Swithenbank

Takhar, H. S. Free convection from a flat plate, **34**, 1968, 81

Entry-length flow in a vertical cooled pipe, **34**, 1968, 641

Talbot, L. *See* Bellhouse & Talbot

Talke, Frank E. & Berger, Stanley A. The flat plate trailing edge problem, **40**, 1970, 161

Tallmadge, J. A. *See* White & Tallmadge

Tam, Christopher K. W. A note on disturbances in slightly supercritical plane Poiseuille flow, **30**, 1967, 17

The drag on a cloud of spherical particles in low Reynolds number flow, **38**, 1969, 537

Tam, Kuen K. On the asymptotic solution of the Orr–Sommerfeld equation by the method of multiple-scales, **34**, 1968, 145

Tamada, K. *See* Seebass & Tamada

Tatro, P. R. & Mollo-Christensen, E. L. Experiments on Ekman layer instability, **28**, 1967, 531

Taub, Paul A. The interaction of a fibre tangle with an airflow, **27**, 1967, 561

Taylor, G. I. & McEwan, A. D. The stability of a horizontal fluid interface in a vertical electric field, **22**, 1965, 1

See also McEwan & Taylor

Tennekes, H. Similarity laws for turbulent boundary layers with suction or injection, **21**, 1965, 689

Ter-Minassiants, S. M. The diffraction accompanying the regular reflexion of a plane obliquely impinging shock wave from the walls of an obtuse wedge, **35**, 1969, 391

Thomann, H. The effect of streamwise wall curvature on heat transfer in a turbulent boundary layer, **33**, 1968, 283

Thomas, N. H. *See* Stevenson & Thomas

Thomas, R. H. & Walters, K. On the flow of an elastico-viscous liquid in a curved pipe of elliptic cross-section under a pressure-gradient, **21**, 1965, 173

Thompson, B. W. Secondary flow in a Hele–Shaw cell, **31**, 1968, 379

Thompson, H. A. & Soğin, H. H. Experiments on the onset of thermal convection in horizontal layers of gases, **24**, 1966, 451

Thompson, Rory Diurnal tides and shear instabilities in a rotating cylinder, **40**, 1970, 737

Thonemann, P. C. *See* Klozenberg, McNamara & Thonemann

Thornhill, C. K. *See* Coombs & Thornhill

Thorpe, S. A. On wave interactions in a stratified fluid, **24**, 1966, 737

On standing internal gravity waves of finite amplitude, **32**, 1968, 489

A method of producing a shear flow in a stratified fluid, **32**, 1968, 693

Neutral eigensolutions of the stability equation for stratified shear flow, **36**, 1969, 673

Experiments on the instability of stratified shear flows: immiscible fluids, **39**, 1969, 25

Thorpe, S. A., Hutt, P. K. & Soulsby, R. The effect of horizontal gradients on thermohaline convection, **38**, 1969, 375

Tiederman, W. G. *See* Reynolds & Tiederman

Tillett, J. P. K. On the laminar flow in a free jet of liquid at high Reynolds numbers, **32**, 1968, 273

Timme, A. *See* Michalke & Timme

Titman, C. W. *See* Hide & Titman

Todd, L. The evolution of trans-Alfvénic shocks in gases of finite electrical conductivity, **21**, 1965, 193

Evolution of switch-on and switch-off shocks in a gas of finite electrical conductivity, **24**, 1966, 597

Hartmann flow in an annular channel, **28**, 1967, 384

Magnetohydrodynamic flow along cylindrical pipes under non-uniform transverse magnetic fields, **31**, 1968, 321

Tokuda, Naoyuki On the impulsive motion of a flat plate in a viscous liquid, **33**, 1968, 657

Toomre, Alar *See* Aldridge & Toomre

Toomre, J. *See* Moffatt & Toomre

Torrance, K. E., Orloff, L. & Rockett, J. A. Experiments on natural convection in enclosures with localized heating from below, **36**, 1969, 21

Torrance, K. E. & Rockett, J. A. Numerical study of natural convection in an enclosure with localized heating from below—creeping flow to the onset of laminar instability, **36**, 1969, 33

Townsend, A. A. Excitation of internal waves by a turbulent boundary layer, **22**, 1965, 241

Self-preserving flow inside a turbulent boundary layer, **22**, 1965, 773

The response of a turbulent boundary layer to abrupt changes in surface conditions, **22**, 1965, 799

Self-preserving development within turbulent boundary layers in strong adverse pressure gradients, **23**, 1965, 767

Internal waves produced by a convective layer, **24**, 1966, 307

The flow in a turbulent boundary layer after a change in surface roughness, **26**, 1966, 255

The mechanism of entrainment in free turbulent flows, **26**, 1966, 689

Excitation of internal waves in a stably-stratified atmosphere with considerable wind-shear, **32**, 1968, 145

Tritton, D. J. Note on the effect of a nearby obstacle on turbulence intensity in a boundary layer, **28**, 1967, 433

Some new correlation measurements in a turbulent boundary layer, **28**, 1967, 439

Tritton, D. J. & Zarraga, M. N. Convection in horizontal layers with internal heat generation. Experiments, **30**, 1967, 21

Tsou, F. K., Sparrow, E. M. & Kurtz, E. F. Hydrodynamic stability of the boundary layer on a continuous moving surface, **26**, 1966, 145

Tuck, E. O. The effect of non-linearity at the free surface on flow past a submerged cylinder, **22**, 1965, 401

Shallow-water flows past slender bodies, **26**, 1966, 81

A note on the swimming problem, **31**, 1968, 305

Tucker, H. J. & Reynolds, A. J. The distortion of turbulence by irrotational plane strain, **32**, 1968, 657

Tunstall, M. J. & Harvey, J. K. On the effect of a sharp bend in a fully developed turbulent pipe-flow, **34**, 1968, 595

Turcotte, D. L. & Oxburgh, E. R. Finite amplitude convective cells and continental drift, **28**, 1967, 29

Turner, J. S. The constraints imposed on tornado-like vortices by the top and bottom boundary conditions, **25**, 1966, 377

Jets and plumes with negative or reversing buoyancy, **26**, 1966, 779

The behaviour of a stable salinity gradient heated from below, **33**, 1968, 183

The influence of molecular diffusivity on turbulent entrainment across a density interface, **33**, 1968, 639

See also Baines & Turner; Bretherton & Turner

Turner, J. T. A computational method for the flow through non-uniform gauzes: the general two-dimensional case, **36**, 1969, 367

Uberoi, Mahinder S. & Wallis, Stanley Small axisymmetric contraction of grid turbulence, **24**, 1966, 539

Uchida, S. & Suzuki, T. On a similar solution for a turbulent half-jet along a curved streamline, **33**, 1968, 379

Uldrick, J. P. On the propulsion efficiency of swimming flexible hydrofoils of finite thickness, **32**, 1968, 29

Underwood, Robert Leigh Calculation of incompressible flow past a circular cylinder at moderate Reynolds numbers, **37**, 1969, 95

Uzkan, T. & Reynolds, W. C. A shear-free turbulent boundary layer, **28**, 1967, 803

Van Atta, C. Exploratory measurements in spiral turbulence, **25**, 1966, 495

Van Atta, C. & Chen, W. Y. Correlation measurements in grid turbulence using digital harmonic analysis, **34**, 1968, 497

Measurements of spectral energy transfer in grid turbulence, **38**, 1969, 743

See also Coles & Van Atta

Van Dorn, W. G. Boundary dissipation of oscillatory waves, **24**, 1966, 769

Van Dyke, Milton *See* Conti & Van Dyke

Van Moorhem, William K. *See* Moran & Van Moorhem

Vanoni, V. A. *See* Davidson, Pearson & Vanoni

Vasudeva, B. R. Boundary layer instability experiment with localized disturbance, **29**, 1967, 745

Velthuizen, H. G. M. & Wijngaarden, L. van Gravity waves over a non-uniform flow, **39**, 1969, 817

Venezian, Guilio Effect of modulation on the onset of thermal convection, **35**, 1969, 243

Verhagen, J. H. G. & Wijngaarden, L. van Non-linear oscillations of fluid in a container, **22**, 1965, 737

Verma, Pratibha & Verma, Y. K. Capillary instability of a rotating jet with twisted magnetic field, **22**, 1965, 33

Verma, Y. K. *See* Verma & Verma

Veronis, G. Motions at subcritical values of the Rayleigh number in a rotating fluid, **24**, 1966, 545

Large-amplitude Bénard convection, **26**, 1966, 49

Large-amplitude Bénard convection in a rotating fluid, **31**, 1968, 113

Effect of a stabilizing gradient of solute on thermal convection, **34**, 1968, 315

See also Kroll & Veronis

Vest, Charles M. & Arpaci, Vedat S. Stability of natural convection in a vertical slot, **36**, 1969, 1

Overstability of a viscoelastic fluid layer heated from below, **36**, 1969, 613

Vickery, B. J. Fluctuating lift and drag on a long cylinder of square cross-section in a smooth and in a turbulent stream, **25**, 1966, 481

Vidal, A. & Acrivos, Andreas The influence of Coriolis force on surface-tension-driven convection, **26**, 1966, 807

See also Liang, Vidal & Acrivos

Vincenti, Walter G. *See* Cheng & Vincenti; Cogley & Vincenti

Virk, P. S., Merrill, E. W., Mickley, H. S., Smith, K. A. & Mollo-Christensen, E. L. The Toms phenomenon: turbulent pipe flow of dilute polymer solutions, **30**, 1967, 305

Viviand, H. & Berger, S. A. The base-flow and near-wake problem at very low Reynolds numbers. Part 1. The Stokes approximation, **23**, 1965, 417

The base-flow and near-wake problem at very low Reynolds numbers. Part 2. The Oseen approximation, **23**, 1965, 439

Vogel, W. M. *See* Grant, Hughes, Vogel & Moilliet; Grant, Moilliet & Vogel

Vrebalovich, T. *See* Kistler & Vrebalovich

Walin, Gösta Some aspects of time-dependent motion of a stratified rotating fluid, **36**, 1969, 289

Wallis, Stanley *See* Uberoi & Wallis

Walters, K. Rheometrical flow systems. Part 1. Flow between concentric spheres rotating about different axes, **40**, 1970, 191

See also Abbott & Walters; Beard, Davies & Walters; Griffiths, Jones & Walters; Thomas & Walters

Wang, Chang-Yi On high frequency oscillatory viscous flows, **32**, 1968, 55

Wang, D. P. Finite amplitude effect on the stability of a jet of circular cross-section, **34**, 1968, 299

Wang, Henry & Skalak, Richard Viscous flow in a cylindrical tube containing a line of spherical particles, **38**, 1969, 75

Wang, Yee-Chang The interaction of internal waves with an unsteady non-uniform current, **37**, 1969, 761

Warren, F. W. G. Gravity wave damping of hydrostatic oscillations for a buoyant disk, **31**, 1968, 309

Warren, F. W. G. & Mackinnon, R. F. A problem of gravity wave drag at an interface, **34**, 1968, 263

See also Mackinnon, Mulley & Warren

Watson, Pauline M. Classical cellular convection with spatial heat source, **32**, 1968, 399

Weber, J. *See* Mangler & Weber

Webster, R. B. Jet noise simulation on shallow water, **40**, 1970, 423

Wegener, Peter P. & Buzyna, George Experiments on shock stand-off distance in non-equilibrium flow, **37**, 1969, 325

Wegener, Peter P., Chu, Boa-Teh & Klikoff, W. A. Weak waves in relaxing flows, **23**, 1965, 787

Wehrmann, O. H. *See* Champagne, Sleicher & Wehrmann

Weinbaum, Sheldon On the singular points in the laminar two-dimensional near wake flow field, **33**, 1968, 39

Weinbaum, Sheldon & Garvine, Richard W. On the two-dimensional viscous counterpart of the one-dimensional sonic throat, **39**, 1969, 57

Weinberg, S. L. *See* Shapiro, Jaffrin & Weinberg

Welander, Pierre On the oscillatory instability of a differentially heated fluid loop, **29**, 1967, 17

Welsh, Robert L. Imploding shocks and detonations, **29**, 1967, 61

Wentzell, R. A. Torsional oscillations of a fluid sphere with a rigid boundary in a uniform magnetic field, **24**, 1966, 275

Werle, M. J. & Davis, R. T. Self-similar solutions to the second-order incompressible boundary layer equations, **40**, 1970, 343

Wesseling, P. Laminar convection cells at high Rayleigh number, **36**, 1969, 625

White, D. A. Velocity measurements in axisymmetric jets of dilute polymer solutions, **28**, 1967, 195

White, D. A. & Tallmadge, J. A. Static menisci on the outside of cylinders, **23**, 1965, 325

White, H. J. *See* Niiler & White

Whitehead J. A. & Chen, M. M. Thermal instability and convection of a thin fluid layer bounded by a stratified region, **40**, 1970, 549

See also Chen & Whitehead; Newell & Whitehead

Whitham, G. B. A general approach to linear and non-linear dispersive waves using a Lagrangian, **22**, 1965, 273

Non-linear dispersion of water waves, **27**, 1967, 399

A note on shock dynamics relative to a moving frame, **31**, 1968, 449

Wijngaarden, L. van On the equations of motion for mixtures of liquid and gas bubbles, **33**, 1968, 465

See also Velthuizen & Wijngaarden; Verhagen & Wijngaarden

Wilks, Graham Swirling flow through a convergent funnel, **34**, 1968, 575

Wille, R. & Fernholz, H. Report on the first European Mechanics Colloquium, on the Coanda effect, **23**, 1965, 801

Williams, F. A. Linearized analysis of constant-property duct flows, **34**, 1968, 241

An approach to turbulent flame theory, **40**, 1970, 401

Williams, G. C. *See* Becker, Hottel & Williams

Williams, Gareth P. Numerical integration of the three-dimensional Navier–Stokes equations for incompressible flow, **37**, 1969, 727

Williams, M. M. R. Boundary value problems in the kinetic theory of gases. Part 1. Slip flow, **36**, 1969, 145

Williams, W. E. Diffraction of surface waves on an incompressible fluid, **22**, 1965, 253

Boundary effects in Stokes flow, **24**, 1966, 285

A note on slow vibrations in a viscous fluid, **25**, 1966, 589

See also Hunt & Williams; Packham & Williams

Willis, D. Roger Mass flow through a circular orifice and a two-dimensional slit at high Knudsen numbers, **21**, 1965, 21

Willis, G. E. *See* Deardorff & Willis; Deardorff, Willis & Lilly

Willmarth, W. W. Corrigendum: Measurements of the fluctuating pressure at the wall beneath a thick turbulent boundary layer, **21**, 1965, 107

Willmarth, W. W. & Enlow, R. L. Aerodynamic lift and moment fluctuations of a sphere, **36**, 1969, 417

Willmarth, W. W., Hawk, N. E., Galloway, A. J. & Roos, F. W. Aerodynamics of oscillating disks and a right-circular cylinder, **27**, 1967, 177

Willmarth, W. W. & Roos, F. W. Resolution and structure of the wall pressure field beneath a turbulent boundary layer, **22**, 1965, 81
Wilson, J. L. *See* Blythe, Petty, Schofield & Wilson
Wilson, S. The development of Poiseuille flow, **38**, 1969, 793
Witte, Jan H. Mixing shocks in two-phase flow, **36**, 1969, 639
Wong, H. & Bershader, D. Thermal equilibration behind an ionizing shock **26**, 1966, 459
Wood, C. J. Visualization of an incompressible wake with base bleed, **29**, 1967 259
Wood, I. R. Selective withdrawal from a stably stratified fluid, **32**, 1968, 209
Wood, W. W. Properties of inviscid, recirculating flows, **22**, 1965, 337
Calculations for anemometry with fine hot wires, **32**, 1968, 9
Wooding, R. A. Growth of fingers at an unstable diffusing interface in a porous medium or Hele–Shaw cell, **39**, 1969, 477
Woods, J. D. Wave-induced shear instability in the summer thermocline, **32**, 1968, 791
Woods, L. C. On ionizing shock waves in a cylindrical plasma, **22**, 1965, 689
Density waves in low-pressure plasma columns, **23**, 1965, 315
On the instability of ventilated cavities, **26**, 1966, 437
Wordsworth, J. *See* Horlock & Wordsworth
Wronski, Stanislaw *See* Goren & Wronski
Wortmann, F. X. Visualization of transition, **38**, 1969, 473
Wu, Jin Laboratory studies of wind-wave interactions, **34**, 1968, 91
Mixed region collapse with internal wave generation in a density-stratified medium, **35**, 1969, 531
Wu, T. Y. T. *See* Graebel, Long & Wu
Wunsch, Carl Progressive internal waves on slopes, **35**, 1969, 131
Wygnanski, I. The two-dimensional laminar jet in parallel streaming flow, **27**, 1967, 431
Wygnanski, I. & Champagne, F. H. The laminar wall-jet over a curved surface, **31**, 1968, 459,
Wygnanski, I. & Fiedler, H. Some measurements in the self-preserving jet, **38**, 1969, 577

Yanowitch, Michael Effect of viscosity on gravity waves and the upper boundary condition, **29**, 1967, 209
Yearn, J. A. *See* Maude & Yearn
Yerushalmi, Joseph *See* Goldin, Yerushalmi, Pfeffer & Shinnar
Yih, Chia-Shun Gravitational instability of a viscous fluid in a magnetic field, **22**, 1965, 579
On large-amplitude magnetohydrodynamics, **23**, 1965, 261
Note on edge waves in a stratified fluid, **24**, 1966, 765
Instability due to viscosity stratification, **27**, 1967, 337
Instability of laminar flows due to a film of adsorption, **28**, 1967, 493
Equations governing steady three-dimensional large-amplitude motion of a stratified fluid, **29**, 1967, 539

Instability of unsteady flows or configurations. Part 1. Instability of a horizontal liquid layer on an oscillating plane, **31**, 1968, 737

A class of solutions for steady stratified flows, **36**, 1969, 75

Note on eigenvalue bounds for the Orr–Sommerfeld equation, **38**, 1969, 273

Yin, Y. K. *See* Sichel & Yin

Yonas, G. Measurements of drag in a conducting fluid with an aligned field and large interaction parameter, **30**, 1967, 813

Yuen, Man-Chuen Non-linear capillary instability of a liquid jet, **33**, 1968, 151

See also Goedde & Yuen

Zarraga, M. N. *See* Tritton & Zarraga

Zdravkovich, M. M. Smoke observations of the wake of a group of three cylinders at low Reynolds number, **32**, 1968, 339

Smoke observations of the formation of a Kármán vortex street, **37**, 1969, 491

Zelazo, Ronald E. & Melcher, James R. Dynamics and stability of ferrofluids: surface interactions, **39**, 1969, 1

Zien, H. M. *See* Lessen, Fox & Zien; Lessen, Harpavat & Zien; Lessen, Zien & Leibovich

Zienkiewicz, H. K. *See* Johannesen, Bird & Zienkiewicz

Zukoski, E. E. Influence of viscosity, surface tension and inclination angle on motion of long bubbles in closed tubes, **25**, 1966, 821